

# Service Manual

AUTOMOTIVE CONSUMER ELECTRONICS  
**CQ-MRX777EUC**



## High-Power CD/MD Player/Receiver with Changer Control



### Specifications\*

#### General

Power supply	: 12V DC (11V-16V) Test Voltage 14.4V, Negative ground
Current consumption	: 8.5 A (at rated CD operation output)
Rated output	: 16W × 4 channels (1000Hz, 1%, 4Ω)
Maximum output	: 40W × 4 channels
Suitable speaker impedance	: 4Ω
Audio input impedance	: 10kΩ
Audio input sensitivity	: 200mV (AUX IN)
PRE-OUT output voltage	: 2V
PRE-OUT output impedance	: 200 Ω

#### Tuners

##### FM Tuners

Frequency range	: 87.9~107.9MHz
Useable sensitivity	: 11dBf
Total harmonic distortion (mono)	: 0.3%
Weighted S/N ratio (mono)	: 70 dB
Frequency response	: 20 - 15,000Hz (±3 dB)
Stereo separation	: 42 dB (1kHz)
Image-rejection ratio	: 75 dB

##### AM Tuners

Frequency range	: 530~1,710kHz
Useable sensitivity (S/N 20dB)	: 27 dB/μV
Image-jamming ratio	: 65 dB

#### MD Player

Number of channel	: 2 channels
Quantization	: 16-bit linear
Frequency response	: 5 - 20,000Hz (±1 dB)
Signal to Noise ratio	: 90 dB (1kHz)
Wow and flutter	: Below measurable limits

#### CD Player

Number of channel	: 2 channels
Quantization	: 16-bit linear
Frequency response	: 5 - 20,000Hz (±1 dB)
Dynamic range	: 90 dB (1kHz)
Wow and flutter	: Below measurable limits

#### DSP

Number of channel	: 2 channels for input 4channels for output
Reverberation level adjustment	: 7 steps
Equalizer center frequency	: 80, 160, 320, 640, 1.6k, 4k, 10k (Hz)
Equalizer range	: -12 dB to +12 dB (13 step)

<b>Dimensions**</b> (W×H×D)	: 178 (W) × 50 (H) × 160 (D) mm
<b>Weight**</b>	: 2kg

\* Specifications and the design are subject to possible modification without notice due to improvements.

\*\* Dimensions and weight shown are approximate.

\*\*\* Above specifications comply with EIA standards.

# Panasonic®

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(Recycled Paper)

**⚠ WARNING**

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.

Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the products dealt with in this service information by anyone else could result in serious injury or death.

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**FEATURES**

- 1DIN Size Body with MD/CD Player, AM/FM Tuner, Power AMP (40W×4) and CD/MD Changer Control Function
- DSP Full-digital Sound Control Functions (HEQ, DRCII, SBC)
- 2 CD/MD Changer Control
- PRE Output Terminal with DDBC (Digital Dynamic Base Control) Function
- Detachable Face Plate Security
- AUX IN RCA Connector
- 5 × 7 dot LCD Display (Max 60 Characters)

**REPLACING THE FUSE**

Be sure to use a fuse of the specified rating (10A) when replacing a blown fuse. Fuses with higher capacity ratings, use of any substitute, or connection without a fuse may result in a fire hazard or damage to the unit.

**MAINTENANCE**

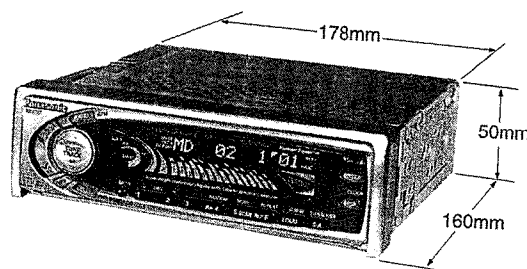
Your product is designed and manufactured to ensure a minimum of maintenance. Use a soft cloth for routine exterior cleaning. Never use benzine, thinner, or other solvent.

**RADIO AND CD/MD DECK ALIGNMENT****RADIO BLOCK**

Do not align the AM and FM package block is necessary, it will be supplied already aligned at the factory.

**CD/MD DECK BLOCK**

This model has no servo alignment points because microcomputer controls the servo circuit.

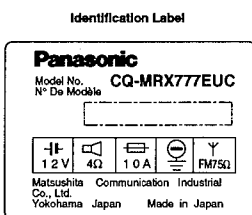
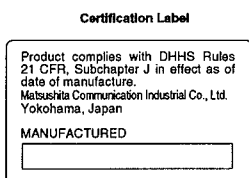
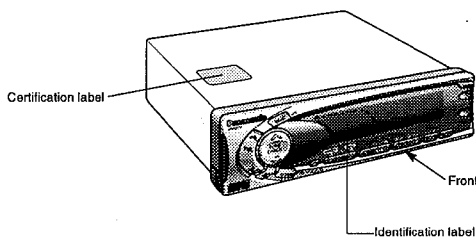
**DIMENSIONS**

□ Laser Products (This page describes the standard in only United States.)

**Caution:**  
This product utilizes a laser.  
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

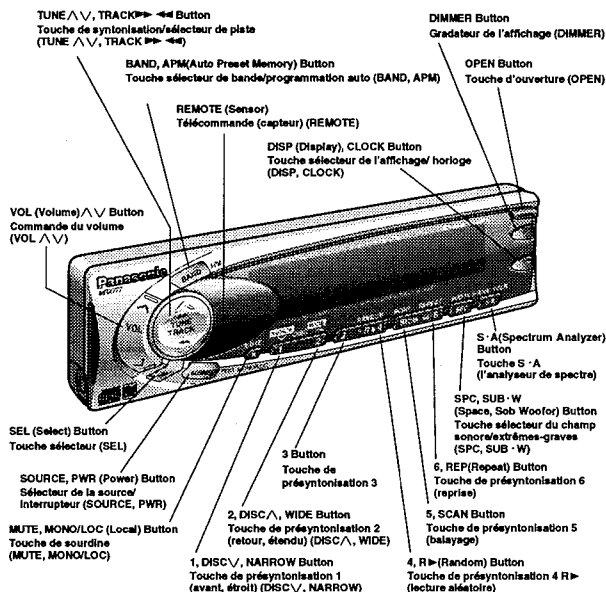
**Laser products:**  
Wave Length 780 nm  
Laser Power No hazardous radiation is emitted with safety protection.

• Label Indications and their locations



## Name of Controls/Nomenclature

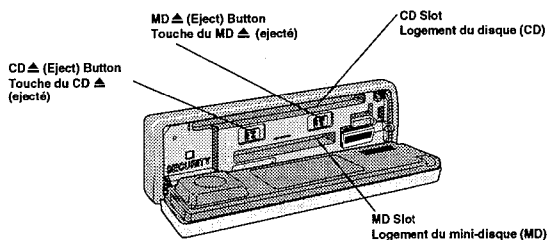
### Front Panel (Front)/Panneau avant (Avant)



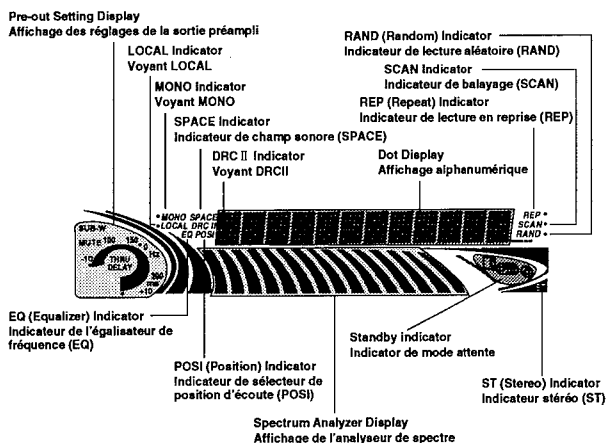
6

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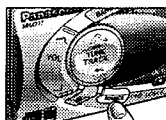
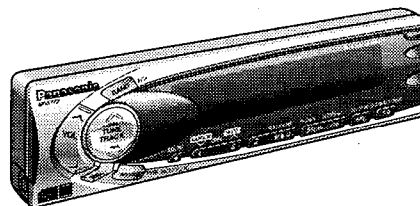
### Front Panel (Open)/Panneau avant (ouvert)



### Display/Affichage



## Operation: General



### Starting Operation/Power

Turn the key in the ignition until the accessory indicator lights.

Press **SOURCE(PWR)** to switch on the power.

When you are using your unit for the first time, the tuner mode is activated and DEMO mode pattern is displayed.

\* Press **AM/FM**, **CD**, **MD**, **CH-C** when using a remote control. (Before pressing **CD** or **MD**, make sure that a disc is inside, and before pressing **CH-C**, make sure that a CD changer is connected correctly, and that the magazine is in the changer.)

**Note:**  
The display may remain unchanged when the above button is pressed. In such a case, press **S-A** to cancel the demonstration mode. (See page 39.)

### Power Off

Press and hold **SOURCE(PWR)** for more than 1 second to switch off the power.

\* Press **OFF** when using a remote control.

### Switching Operation Mode

Press **SOURCE** to change the operation mode as follows.

TUNER  $\rightarrow$  CD  $\rightarrow$  MD  $\rightarrow$  (CD CHANGER)  $\rightarrow$  AUX

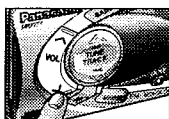
\* Press **AM/FM**, **CD**, **MD**, **CH-C**, **AUX IN** when using a remote control.

**Note:**  
If no disc is inside, if the changer is not connected, or if the magazine is not in the changer, the source in question will not be selected.

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## Operation: General (Continued)



### Volume

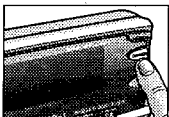
Press VOL $\Delta$  or VOL $\nabla$  to increase or decrease the volume.

0 to 40

VOLUME 32

#### Note:

An adjusted volume is saved in the memory for each sound source so that the volume changes from one sound source to another. (Intelligent volume function)



### Dimmer

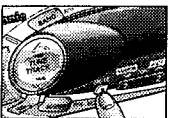
Display brightness with the side-marker lamps on or off can be set.

(Default: DIMMER MID ... When side-maker lamp on  
DIMMER HIGH ... When side-maker lamp off)

Press DIMMER to change to the dimmer level as follows.

- DIMMER HIGH : Light grows brighter.
- DIMMER MID : Reversed downward
- DIMMER LOW : Reversed leftward

\* Press DIMMER when using a remote control.



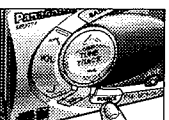
### Mute

Sound can be temporarily muted.

Press  $\bullet$  (MUTE) to switch the mute on or off.  
MUTE OFF : Regular volume

MUTE ON : Mute (No sound)

The mute indicator blinks while the mute is on.



### Listening to External Device (AUX)

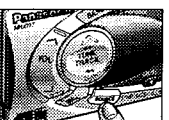
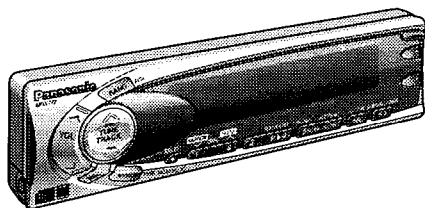
An external device should be connected to the AUX input on the back. Use the controls on the external device for its operation. For details, refer to the manual for that device.

Press SOURCE to change to AUX mode.

\* Press and hold CD (AUX IN) for more than 2 seconds when using a remote control.

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## Radio Basics



### Tuner Mode

Press SOURCE to change to TUNER mode.

T TUNER T

\* Press AM/FM when using a remote control.

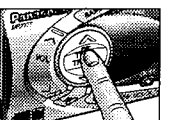


### Band

Press BAND to change the bands as follows.

FM1  $\rightarrow$  FM2  $\rightarrow$  FM3  $\rightarrow$  AM

\* Press AM/FM when using a remote control.



### Manual Tuning

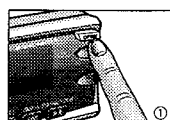
Press TUNE $\Delta$  or TUNE $\nabla$  to move to a higher or lower frequency. ST indicator lights when FM stereo broadcast is received.



### Seek Tuning

Press and hold TUNE $\Delta$  or TUNE $\nabla$  for more than 0.5 second, then release. The radio automatically stops at the next station. ST indicator lights when FM stereo broadcast is received.

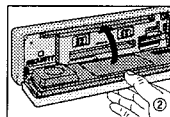
12



## Open/Close the Front Panel

### ① Open the front panel

Press OPEN on the front panel



### ② Close the front panel

Push the front panel up by hand to return it to regular position.

#### Caution:

- When the front panel is opened, do not force it down and do not put anything on it because these may result in damage to the unit.
- Do not adjust the front panel angle, or open/close the front panel, if a CD or MD has not been completely inserted into, or removed from the CD or MD slot.
- Do not insert an MD into the CD slot to prevent any trouble.

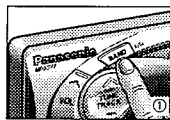
#### Note:

No operation can be performed, except for CD or MD eject, when the front panel is open.

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## Station Preset

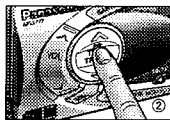
FM1, FM2, FM3 and AM can save maximum 6 stations each in their preset station memories.



### Manual Station Preset

① Press BAND to select a desired band.

\* Press AM/FM when using a remote control.



② Use manual or seek tuning to find a station that you would like to save into the memory.

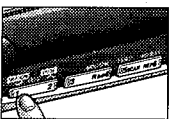
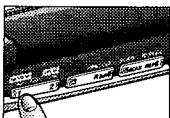
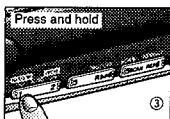
③ Press and hold one of the preset buttons 1 to 6 until the display blinks. Repeat the process to set other stations for the FM1 to AM bands.

FM1-1 87.3

Preset number

#### Note:

You can change the memory setting by repeating the above procedure.



### Tuning in a Preset Station

Press any of the buttons 1 to 6 to tune in the preset station.

### Auto Station Preset

Select a band, press and hold BAND(APM) for more than 2 seconds. (APM: Auto Preset Memory)

\* Press AM/FM for more than 2 seconds when using a remote control.

- The 6 strongest available stations will be automatically set in memory on preset buttons 1 to 6.
- Once set, the preset stations are sequentially scanned for 5 seconds each.
- Press the appropriate preset button for the station you would like to listen to.

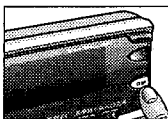
#### Caution:

For safety reasons, do not attempt to program while driving.

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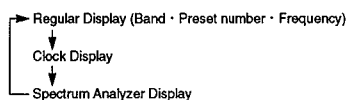


## Radio Basics (Continued)



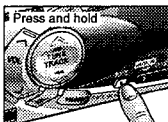
### Switching Display

Press **DISP** to change the display as follows.



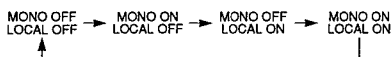
### MONO/LOCAL Selection

- Much interference is reduced during a weak FM stereo broadcasts when MONO is on. (Only for FM mode)
- Searching stops automatically at a strong signal only when LOCAL is on.



#### ① FM broadcasts

Press and hold **(MONO/LOC)** for more than 2 seconds to change the mode until reaching a desired mode, then release.



\* Press and hold **MUTE** for more than 2 seconds when using a remote control.

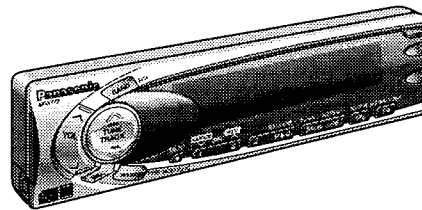
#### ② AM broadcasts

Press and hold **(MONO/LOC)** for more than 2 seconds to change the LOCAL mode as follows.



\* Press and hold **MUTE** for more than 2 seconds when using a remote control.

## Compact Disc Player Basics



### CD Mode

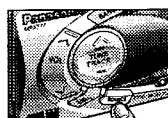
**With no disc inserted (Standby Indicator off)**

- ① Press **OPEN** to open the front panel.
- ② Insert a disc with the label side up.
- ③ Close the front panel by hand.

The power is automatically switched on to start playing the CD.

**With a disc inserted (Standby Indicator lights.)**

Press **SOURCE** to change to CD.  
Play starts from first track. The standby indicator blinks.  
\* Press **CD** when using a remote control.



CD Standby Indicator

#### Caution:

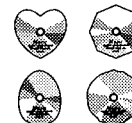
- Never use a protect film, stabilizer and the like that are commercially available as CD accessories because they may cause faults or failures.
- Close the control panel after the CD is completely pulled in.
- Do not insert an MD into the CD slot to prevent any trouble.

#### Note:

No operation can be performed except for CD eject when the front panel is open.

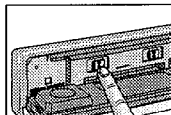
#### Note:

**CDs of Special Shape**  
Heart-shaped, octagonal, or other special-shaped CDs cannot be played.  
Do not use such CDs because they could cause technical trouble.



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## Compact Disc Player Basics (Continued)



### Stopping and Ejecting a Disc

Open the front panel. (See page 11.) Press **EJECT** to stop CD play, and the disc will be quietly ejected from the CD slot.

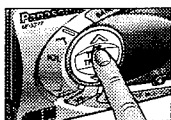
Power is automatically switched off after the CD is ejected.

#### Caution:

- When the front panel is open, do not force it down and do not put anything on it because these may result in damage to the unit.
- Do not adjust the front panel angle, or open/close the front panel, if a CD or MD has not been completely inserted into, or removed from the CD or MD slot.

#### Note:

CD will not be ejected when the car engine switch is in the OFF position, or when the control panel is closed or removed.



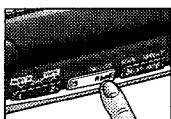
### Track Selection

- Press **TRACK+/-** once to go to the next track.
- Press **TRACK+/-** once to play from the beginning of the track you are listening to. Press twice to play the previous track.
- Press repeatedly to skip the desired number of tracks.



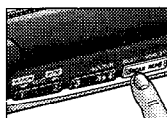
### Track Search

- Press and hold **TRACK+/-** or **TRACK+/-** for more than 0.5 second to activate reverse through or fast forward a track.
- Release **TRACK+/-** or **TRACK+/-** to resume the regular CD play.



### Random Selection

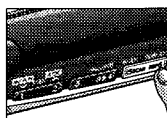
- Press **4(RANDOM)**. A random selection of music is played from all available tracks.
- Press **4(RANDOM)** again to cancel.



### Track Scan

- Press **5(SCAN)**. The display will blink, and the first 10 seconds of each track on the disc will be played in sequence.
- Press **5(SCAN)** again to cancel.
- Scan mode is also canceled when the CD has come to the beginning of the original program, which will then be played again.

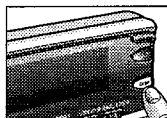
SCAN



### Repeating a Track

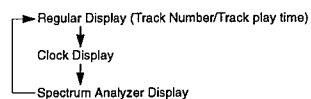
- Press **6(REPEAT)** to repeat the current selection.
- Press **6(REPEAT)** again to cancel.
- The current selection will continue to repeat until you press **6(REPEAT)** again.

REP



### Switching Display

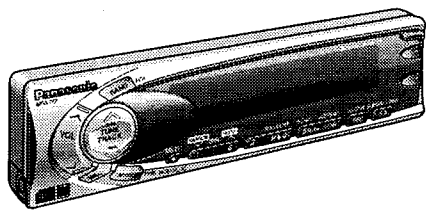
Press **DISP** to select the bands as follows.



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## Mini Disc Player Basics

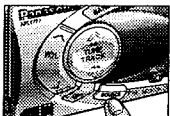


### MD Mode

With no disc inserted (Standby Indicator off)

- ① Press **OPEN** to open the front panel.
- ② Insert a disc with the label side up.
- ③ Close the front panel by hand.

The power is automatically switched on to start playing the MD.



With a disc inserted (Standby Indicator lights.)

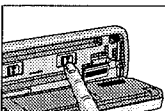
Press **SOURCE** to change to MD.  
Play starts from first track. The standby indicator blinks.  
\* Press MD when using a remote control.



MD Standby Indicator

**Caution:**  
• Close the control panel after the MD is completely pulled in.  
• Do not insert an MD into the CD slot to prevent any trouble.

**Note:** No operation can be performed, except for MD eject, when the front panel is open.



### Stopping and Ejecting a Disc

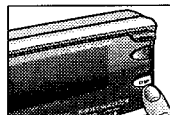
Open the front panel. (See page 11.) Press **▲** to stop MD play, and the disc will be quietly ejected from the MD slot.

Power is automatically switched off after the MD is ejected.

**Caution:**  
• When the front panel is open, do not force it down and do not put anything on it because these may result in damage to the unit.  
• Do not adjust the front panel angle, or open/close the front panel, if a CD or MD has not been completely inserted into, or removed from the CD or MD slot.

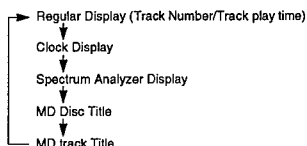
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## Mini Disc Player Basics (Continued)



### Switching Display (MD Title Display)

Press **DISP** to change the display as follows.



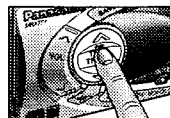
Title information that is recorded in an MD can be displayed with maximum 60 of alphanumeric figures.

### Anti-Shock Memory

This function stores oncoming sound data while playing, thus preventing MD play from being interrupted due to vibration.

Memory storing time : 40 seconds

20



### Track Selection

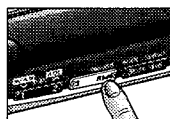
- Press **TRACK** once to go to the next track.
- Press **TRACK** once to play from the beginning of the track you are listening to. Press twice to play the previous track.
- Press repeatedly to skip the desired number of tracks.

MD 01



### Track Search

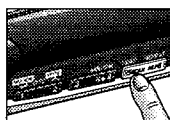
- Press and hold **TRACK** or **TRACK** for more than 0.5 second to activate reverse through or fast forward a track.
- Release **TRACK** or **TRACK** to resume the regular MD play.



### Random Selection

- Press **4(RANDOM)**. A random selection of music is played from all available tracks.
- Press **4(RANDOM)** again to cancel.

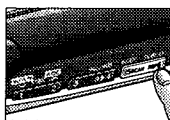
RAND



### Track Scan

- Press **5(SCAN)**. The display will blink and the first 10 seconds of each track on the disc will be played in sequence.
- Press **5(SCAN)** again to cancel.
- Scan mode is also canceled when the MD has come to the beginning of the original program, which will then be played again.

SCAN



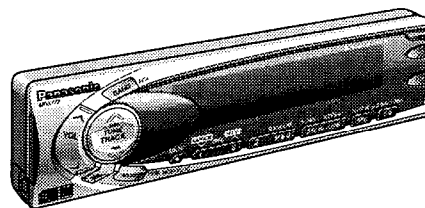
### Repeating a Track

- Press **6(REPEAT)** to repeat the current selection.
- Press **6(REPEAT)** again to cancel.

REP

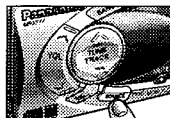
19

## CD Changer Basics



An optional CD changer (CX-DP801EUC for example) is necessary.

When the magazine is inserted and the changer is connected, the standby indicator lights.



### To Start the CD Changer

While CD Changer is connected, press **SOURCE** to Change to the CD Changer mode and playback starts automatically.

\* Press **CH-C** when using a remote control.

**Note:**  
• No changeover takes place if the changer is not connected or if the magazine is not in the changer.  
• If there is no disc in the magazines, "NO DISC" appears on the display.  
• When a disc (magazine) is inserted into the changer when power is off, power is switched on and the disc starts playing.



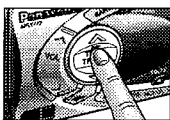
### Disc Selection

Press **1(√DISC)** or **2(DISC/)** to change discs in descending or ascending order.

Then, the selected disc will start playing from the first track.

Disc Number      Track Number

01-01

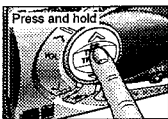


### Track Selection

- Press **TRACK** once to go to the next track.
- Press **TRACK** once to play from the beginning of the current track. Press twice to play the previous track.
- Press repeatedly to skip the desired number of tracks.

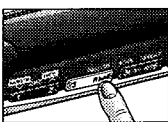
21

## CD Changer Basics (Continued)



### Track Search

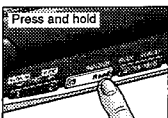
- Press and hold **TRACK** ◀ or **TRACK** ▶ for more than 0.5 second to activate reverse through or fast forward a track.
- Release **TRACK** ◀ or **TRACK** ▶ to resume the regular CD play.



### Random Selection

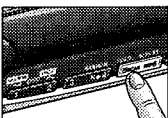
#### Track Random Play

- Press **4(RANDOM)**. A random selection of music is played from all available tracks.
- Press **4(RANDOM)** again to cancel.
- The random indicator lights when Track Random is on.



#### Disc Random Play

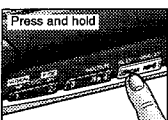
- Press and hold **4(RANDOM)** for more than 2 seconds. A random selection of music is played from current disc selection.
- Press and hold **4(RANDOM)** for more than 2 seconds again to cancel.
- The random indicator blinks when Disc Random is on.



### Scanning

#### Track Scan

- Press **5(SCAN)**. The display blinks and the first 10 seconds of each track on the discs play in sequence.
- Press **5(SCAN)** again to cancel.
- Scan mode is also released when the disc has come to the program preceding the original program.
- The scan indicator lights when Track Scan is on.



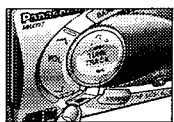
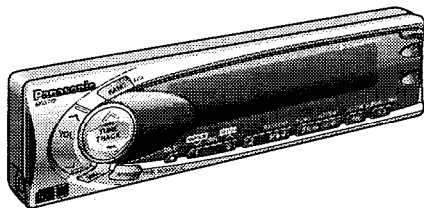
#### Disc Scan

- Press and hold **5(SCAN)** for more than 2 seconds. The 1st track of all the discs in the magazine is played for 10 seconds each.
- Press and hold **5(SCAN)** again to cancel.
- Scan mode is also released when the disc has come to the program preceding the original program.
- The scan indicator lights when Disc Scan is on.



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## Sound Controls



### Tone Quality Adjustment

Press **SEL** to change to tone quality as follows.

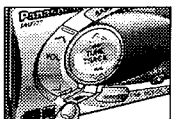
Regular mode → **HUMAN EQ** → **GRAPHIC EQ** → **BAL/FAO**  
 ↑  
**DRCII SELECT** ← **SUPER BASS** ← **POSITION SEL**

#### Note:

When a setting mode is selected but no operation is made within 5 seconds, the display will return to the regular mode.

### Tone Quality Setting/HEQ (Human Equalizer)

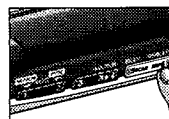
- Unlike **GEQ** (graphic equalizer) which is for adjusting the tone quality of each frequency band, **HEQ** offers a revolutionary function which enables you to select a heavy, light, sharp, or soft tone as desired.
- Select your favorite tone, referring to the Human Equalizer Positioning Image diagram as follows.



- ① Press **SEL** to change to HEQ. The HEQ indicator blinks.



EQ Indicator

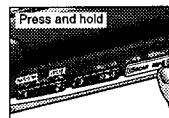


### Repeat Play

#### Repeating a Track

- Press **6(REPEAT)** to repeat the current selection.
- Press **6(REPEAT)** again to cancel.
- The repeat indicator lights when Track Repeat is on.

REP



#### Repeating a Disc

- Press and hold **6(REPEAT)** for more than 2 seconds to repeat the current selection.
- Press and hold **6(REPEAT)** for more than 2 seconds again to cancel.
- The repeat indicator blinks when Disc Repeat is on.

REP

23



#### ② Setting a Tone Quality

With the center fixed flat, any of the 49 equalizer patterns, arranged in vertical and horizontal directions, can be selected.

Press **VOL** / to change to heavy bass sound.

Press **VOL** \ to change to light bass sound.

Press **TRACK** ▶ to change to sharp treble sound.

Press **TRACK** ◀ to change to soft treble sound.

\* Press / \ \ / < > when using a remote control.

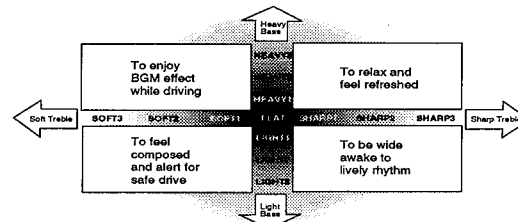


A sound effect closer to the real sound can be enjoyed by setting **Sound Field Effect** as described on the next page after the tone quality setting.

#### ■ Human Equalizer Position Image

You can select a tone quality suiting with your feeling among 49 patterns. (Default: FLAT)

Center : Flat  
 Vertical axis : Heavy and light components of sound (mainly bass)  
 Horizontal axis : Sharp and soft components of sound (mainly treble)

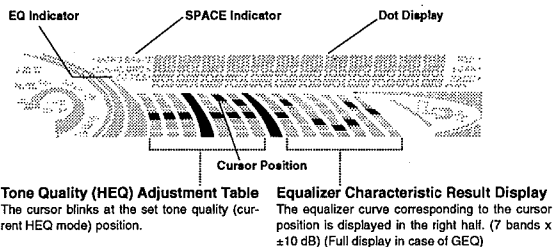


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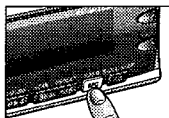
## Sound Controls (Continued)

### Human Equalizer Display



### Sound Field Effect Setting/SPACE

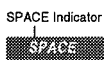
Sound Field Effect can be set for each of the FM, AM, CD, MD, CH-C, and AUX modes.



Select "HUMAN EQ" for Sound Field Effect setting. (See page 24.)  
Press SPC to change the Sound Field Effect as follows.  
(Default: SPACE OFF)

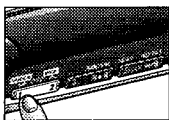
SPACE OFF → LIVE (HOUSE) → (CONCERT) HALL → JAZZ (CLUB)  
CINEMA ← VOCAL ← DISCO ← STADIUM  
\* Sound Field Effect can be set directly even if you do not select "HUMAN EQ".

When Sound Field Effect is set, the SPACE indicator lights.



### Sound Field Setting (NARROW/WIDE)

The sound field range can be further adjusted in the set sound field.  
(Default: 0, Setting Range: -3 to 3 each)



Select "HUMAN EQ" for Sound Field Effect setting.

(See page 24.)

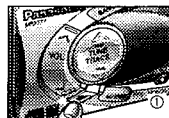
Press SEL to change to HEQ.

Press 1(NARROW) or 2(WIDE) to narrow or widen the sound field range.

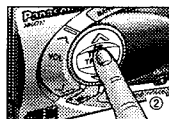
**Example:** When HALL is selected for sound field setting,  
NARROW ..... creates the atmosphere of a small hall.  
WIDE ..... creates the atmosphere of a large hall.

## Sound Range and Level Setting/GEQ (Graphic Equalizer)

GEQ adjustment is to adjust the level on each frequency band to let you set a tonal quality as you like.  
(Default: 0 dB at each frequency; adjustable range: -12 dB to +12 dB (at 2-dB increments))



① Press SEL to change to the GEQ mode.

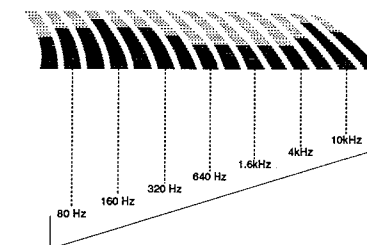
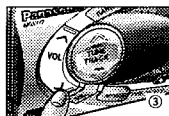


② Press TRACK▶▶ to select the frequency to change the sound level as follows.

80 → 160 → 320 → 640 → 1.6 k → 4 k → 10 k (Hz)

(TRACK◀◀: opposite direction)

\* Press > or < when using a remote control.



**Note:**  
Selected frequency blinks.

③ Press VOL▲ or VOL▼ to raise or lower the level.  
(Default: 0 dB for each frequency)

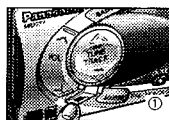
The level is 0 dB when the cursor is at the center. Any of the 13 levels can be changed from +12 dB to -12 dB.

\* Press ▲ or ▼ when using a remote control.

Repeat steps ② and ③ to adjust the level at each frequency.  
The EQ indicator blinks during adjustment, and lights when the level is set.

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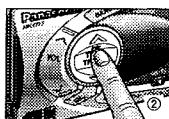
## Sound Controls (Continued)



### Adjusting the Tone Quality in the Memory

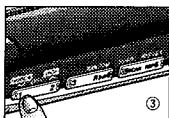
Tone quality (GEQ curve characteristic) settings by GEQ adjustment can be saved in the buttons 1 to 6. (Up to 6 patterns)

① Press SEL to change to the GEQ mode.



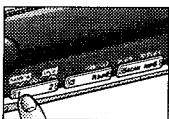
② Select a frequency and adjust the level to set the GEQ.  
(See steps ② and ③ above.)

③ Press and hold one of the preset buttons 1 to 6 until the display blinks.



Preset number

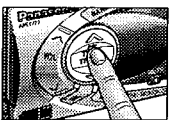
**Note:**  
You can change the memory setting by repeating the above procedure.



### Recalling GEQ Memory

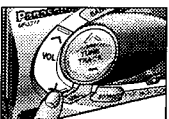
① Press SEL to change to the GEQ mode.

② Press one of the buttons (1 to 6) to recall the desired GEQ.  
The preset GEQ curve is displayed.



### Balance and Fader Adjustment

① Press SEL to change to BAL/FAD mode.



② **Balance Adjustment**

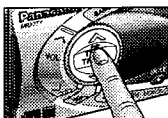
Press TRACK▶▶ or TRACK◀◀ to shift the sound volume to the right or left speakers.

\* Press < or > when using a remote control.

**Fader Adjustment**

Press VOL▲ or VOL▼ to shift the sound volume to the front or rear speakers.

\* Press ▲ or ▼ when using a remote control.



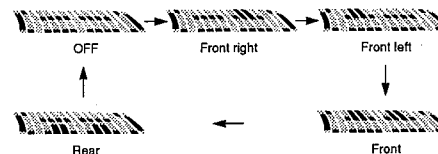
### Changing Listening Position/Seat Position Change

The seat position function reproduces a sound image ideal to the listener according to his or her place in the car.

① Press SEL to change to POSITION SEL mode.

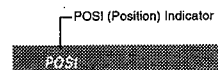
② Press TRACK▶▶ to change the position as follows.  
(Default: OFF)

\* Press > or < when using a remote control.



(TRACK◀◀: opposite direction)

The POSI indicator blinks during adjustment, and lights when the setting is finished.



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## Sound Controls (Continued)

### Bass Emphasis/SBC (Super Bass Control)

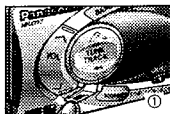
#### Emphasizing Rear Speaker Bass

##### Super Bass Control (Built-in amplifier rear output)

You'll find it quite easy to enjoy super bass from four speakers, using the rear speakers (built-in amplifier).

#### Note:

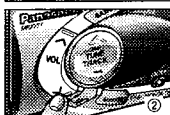
- SBC and SBC-SW cannot be used at the same time.
- SBC is for stereo output, and SBC-SW for monaural output.



#### Setting a SBC Type

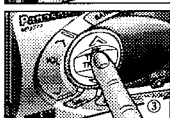
- 1 Press SEL to change to SBC mode.

SUPER BASS

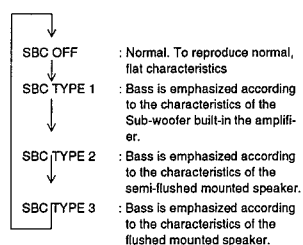


- 2 When "SBC-SW" is displayed, press VOL/ to set SBC.  
\* Press / when using a remote control.

SBC OFF

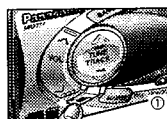


- 3 Press TRACK to change the SBC type as follows.  
(Default: SBC OFF)



(TRACK opposite direction)

\* Press > or < when using a remote control.



#### Setting a SBC-SW Type

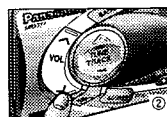
##### Using Rear Speaker Exclusive to Subwoofer Output

The rear speaker (built-in amplifier) can be used as a subwoofer by setting its cutoff frequency.

(In this case, the rear speakers will be in monaural mode.)

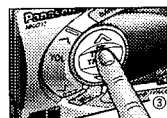
- 1 Press SEL to select SBC mode.

SUPER BASS

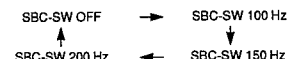


- 2 When "SBC-SW" is not displayed, press VOL/ to change to SBC-SW.  
\* Press / when using a remote control.

SBC-SW OFF



- 3 Press TRACK to change to the SBC-SW cut off frequency as follows.  
(Default: SBC-SW OFF)



(TRACK opposite direction)

\* Press > or < when using a remote control.

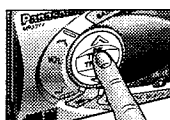
SBC-SW OFF: Set to this position when conventional speakers are connected.  
The tone is regular type, with no cutting off high frequency.

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## Sound Controls (Continued)

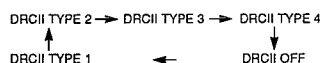
### Dynamic Road Noise Control Setting/DRCII

The DRCII function corrects noise inside the car as appropriate to the running condition of it to let you enjoy listening.



- 1 Press SEL to change to DRCII mode.
- 2 Press TRACK to change the DRCII type as follow.

(Default: DRCII TYPE 2)



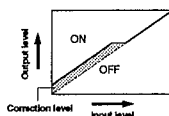
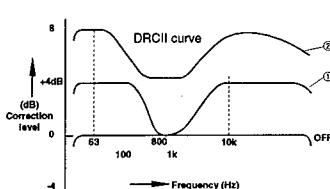
(TRACK opposite direction)

\* Press > or < when using a remote control.

The DRCII indicator blinks during adjustment, and lights when the setting is finished.

Model	Description	Characteristics
TYPE1	Town drive	DRC curve ①, compressor OFF
TYPE2	Highway drive	DRC curve ②, compressor OFF
TYPE3	Music in low volume in town drive	DRC curve ①, compressor ON
TYPE4	Music in low volume in highway drive	DRC curve ②, compressor ON

The DRCII curve changes in the pattern ① or ② as follows:



The compressor corrects low-level music signals to a level for easy listening.

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## Pre-out (External Output) Setting

### Pre-out (External Output) Switching

Connect an optional power amplifier (CY-M9054EUC, for example) and set it to suit your system.

Your unit has a preout for rear output and another for Sub-woofer/iron/rear output. The operating procedures for the possible setting of preout (Sub-woofer/iron/rear) outputs are described in this section.

- Sub-woofer output if an external amplifier or a Sub-woofer with a built-in amplifier is connected
- Through output if a system-up speaker is connected

#### Note:

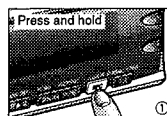
SUB·W and THRU cannot be used at the same time.

### Sub-woofer Output (SUB·W) Mode Setting

- The SUB·W indicator blinks during adjustment and lights steadily when the mode is set.

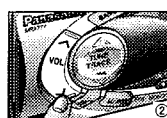
#### Note:

- Sub-woofer output is monaural and does not change even if the volume balance of the built-in amplifier is adjusted. (See Fader, page 28.)
- In Sub-woofer output mode, BAL/FAD, POSITION, SBC/SBC-SW, DRCII and SPACE effects are invalid.

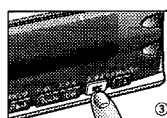


#### Selecting a Sub-woofer Output Setting Item

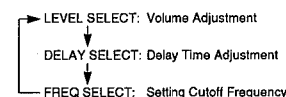
- 1 Press and hold SPC(SUB·W) for more than 2 seconds to change to the preout setting mode.



- 2 Press VOL/ to display "PREOUT SUB·W".  
\* Press / when using a remote control.



- 3 With Sub-woofer output selected, press SPC(SUB·W) to change to the SUB·W mode as follows.



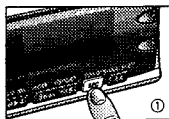
#### Note:

When a setting mode is selected but no operation is made within 5 seconds, the display will return to the regular operation mode.

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## Pre-out (External Output) Setting (Continued)



### Pre-out Output Volume Adjustment

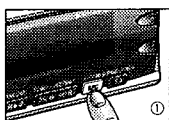
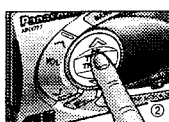
The SUB · W indicator blinks and lights when the setting is finished.

- 1 Press **SPC(SUB-W)** to change to LEVEL SELECT. (See page 33.)

- 2 Press **TRACK** or **TRACK** to decrease or increase the volume. (Default: 0 dB)

\* Press > or < when using a remote control.

Adjusting range:  $\rightarrow$  dB  $\leftarrow$  10 dB  $\rightarrow$  10 dB (at 2-dB intervals)  
 $\rightarrow$  dB: No output from the amplifier connected to the preout terminal (No sound is produced.)



### Sub-woofer Output Relative Volume Setting/Delay Time Adjustment

The bass volume arising from the difference between internal amplifier output and Sub-woofer output generated depending on the car size and the relative positions of the speakers can be adjusted through delay time to increase the bass larger in volume than the other sound ranges.

[Default: 0 ms, Adjusting range: -10 to +10 ms (1 ms each)]  
 Note: 1 ms = 0.001 second

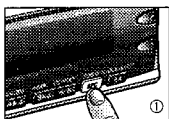
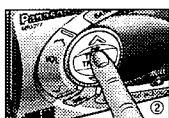
- 1 Press **SPC(SUB-W)** in the preout setting mode to change to DELAY SELECT. (See page 33.)

- 2 Press **TRACK** or **TRACK** to increase or decrease the delay time. (Default: 0 ms)  
**TRACK**: When it is set to more than +1 ms, delay time increases and Sub-woofer output comes later than internal amplifier output.

**TRACK**: When it is set to less than -1 ms, delay time decreases and Sub-woofer output comes sooner than internal amplifier output.

\* Press > or < when using a remote control.

The delay indicator and the ms indicator light when adjusting.

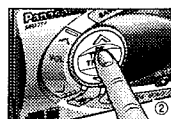


### Setting Upper Limits of Sub-woofer Output Frequency/Setting Cutoff Frequency

Set upper limits of an output bass frequency (cutoff frequency) to suit the Sub-woofers to be used.

- 1 Press **SPC(SUB-W)** in the preout setting mode to change to FREQ. SELECT. (See page 33.)

34



- 2 Press **TRACK** or **TRACK** to change the frequency as follows. (Default: FREQ. OFF)

OFF  $\rightarrow$  100Hz  $\rightarrow$  150Hz  $\rightarrow$  200Hz

(TRACK: opposite direction)

\* Press > or < when using a remote control.

The Hz indicator lights when setting.

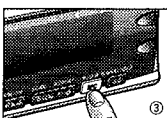
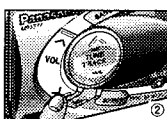
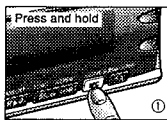
**Note:** In case of using the cutoff frequency or phase difference adjustment function of an external amplifier (available as an option), set the cutoff frequency of this CD/MD receiver to OFF and its delay time to 0 ms.

## Setting THRU Output

The THRU indicator blinks during adjustment, and lights steadily when THRU output is set.

**Note:**

- THRU output is stereo and changes as the volume balance of the built-in amplifier is adjusted. (See Fader, page 28.)
- In THRU output mode, POSITION and SBC/SBC-SW effects are invalid.



### Selecting a THRU Output Setting Item

- 1 Press and hold **SPC(SUB-W)** for more than 2 seconds to change to PREOUT THRU mode.

- 2 Press **VOL/** to display "PREOUT THRU".

\* Press  $\wedge$  when using a remote control.

- 3 Press **SPC(SUB-W)** to switch as follows.

LEVEL SELECT : Volume level adjustment

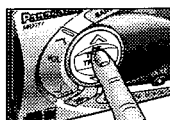
F/R SELECT : Fader interlocked

**Note:**

When a setting mode is selected but no operation is made within 5 seconds, the display will return to the regular operation mode.

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## Pre-out (External Output) Setting (Continued)



### Adjusting the volume level

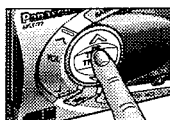
- 1 Press **SPC(SUB-W)** in the PREOUT THRU mode to change to LEVEL SELECT mode. (See page 35.)

- 2 Press **TRACK** or **TRACK** to increase or decrease the volume.

$\rightarrow$  dB, -10 dB  $\rightarrow$  0 dB  $\rightarrow$  10 dB

$\rightarrow$  dB: No output (no sound) from the amplifier connected to Preout

\* Press > or < when using a remote control.



### Fader Adjustment Interlock Setting

Depending on the position where the system-up speaker is connected, either the front or rear can be selected to interlock with the volume balance of the built-in amplifier.

(Default: FRONT)

- 1 Press **SPC(SUB-W)** in the PREOUT THRU mode to change to F/R SELECT mode. (See page 35.)

- 2 Press **TRACK** or **TRACK** to switch as follows.

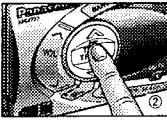
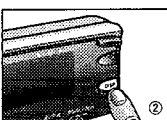
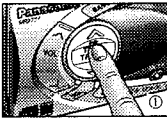
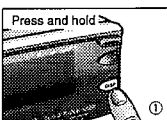
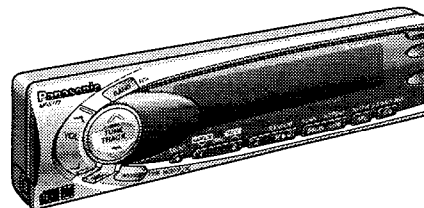
FRONT : Interlock with the front

$\updownarrow$

REAR : Interlock with the rear

\* Press > or < when using a remote control.

## Clock Basics (The clock system is 12-hours.)



### Clock Adjustment

- 1 Hour Adjust

Press and hold **DISP(CLOCK)** for more than 2 seconds to select clock adjust mode. Clock adjust mode is selected and the clock display blinks.

ADJUST

Press **TRACK** or **TRACK** to adjust the hour. Keep the button depressed to change continuously.

\* Press  $\wedge$  or  $\vee$  when using a remote control.

8:00

- 2 Minutes Adjust

Press **DISP(CLOCK)** to select Minutes Adjust mode. Minutes adjust mode is selected and the minute display blinks.

Press **TRACK** or **TRACK** to adjust the minute. Keep the button depressed to change continuously.

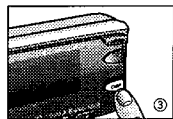
\* Press  $\wedge$  or  $\vee$  when using a remote control.

8:35

36

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## Clock Basics (Continued)

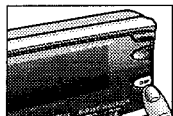


- ③ When you have set the time, press **DISP(CLOCK)**.  
Regular mode is back and the clock starts running again.

Repeat the above steps from ① to ③ to readjust the clock.

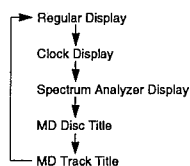
### Note:

- Clock adjustment cannot be made when power is off.
- Clock adjustment cannot be made when MD title is displayed. Switch it back to regular display or clock display before making clock adjustment.



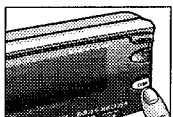
## Clock Display ON/OFF

Clock or MD title can be displayed on the character display.  
(Default: Regular display of sources)  
Press **DISP(CLOCK)** to change the display as follows.



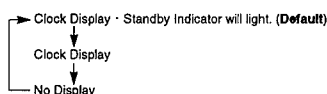
### Note:

- "ADJUST" is displayed in the clock display mode when the clock is not adjusted.
- No changeover to MD title display when the radio, CD, or an external device is in use.



## Clock Display (Power Off)

Press **DISP** after turning off the power.  
Press **DISP** to change the display as follows.

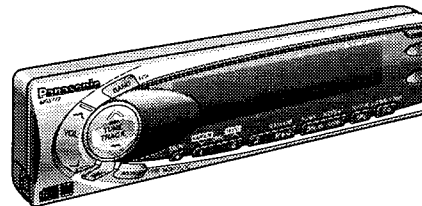


### Note:

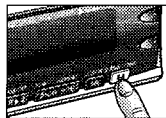
- "ADJUST" is displayed in the clock display mode when the clock is not adjusted.
- Clock adjustment cannot be made when power is off.

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## Useful Functions



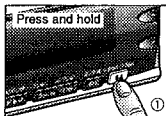
## Switching Spectrum Analyzer Display



Press **S-A** to change to the spectrum analyzer display in the 16 patterns (DEMO, WAVE, AURORA, etc.).

### Note:

- DEMO mode is initially displayed. There may be cases where the buttons cannot be operated in DEMO mode. If so, change the spectrum analyzer display to other than DEMO mode.
- Only the spectrum analyzer lamp goes out if BLANK SPEANA is selected.
- The whole display, including the lights, goes out if ALL DISP OFF is selected. (It lights when this operation is performed, and goes out again in about 5 seconds after the operation.)



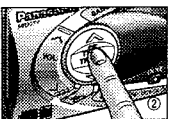
## Spectrum Analyzer Arrangement

The spectrum analyzer display can be changed as follows.  
(Default: NORMAL/Spectrum Analyzer POSI)

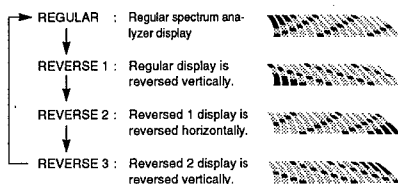
- ① To change to spectrum analyzer arrangement mode, press and hold **S-A** for more than 2 seconds.

The display blinks in spectrum analyzer arrange mode.

## Useful Functions (Continued)



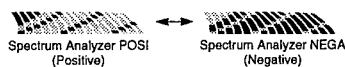
- ② To change the spectrum analyzer display  
Press **TRACK** to change the display as follows.



(TRACK◀◀: opposite direction)

\*Press the > or < when using a remote control.

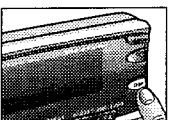
- ③ Press **VOL^** or **VOL^** to switch the display as follows.



\*Press the ^ or v when using a remote control.

### Note:

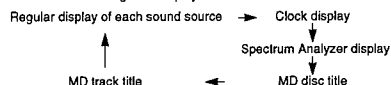
When a setting mode is selected but no operation is made within 5 seconds, the display will return to the normal operation mode.



## To Turn Dot Display into Spectrum Analyzer Display

The spectrum analyzer can be shown on the display.  
(Default: Regular display of each sound source)

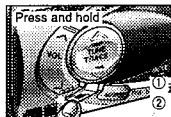
Press **DISP** to change the display as follows:



Note: Neither display pattern change nor display arrangement can be made.

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## Other Settings



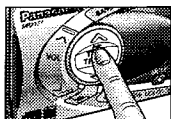
## Function Setting Mode Selection

- ① Press and hold **SEL** for more than 2 seconds to change to the function setting mode.  
② Press **SEL** to change the function setting mode as follows.



### Note:

When a setting mode is selected but no operation is made within 5 seconds, the display will return to the regular operation mode.

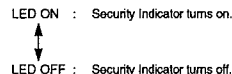


## Lighting Security Indicator

This function is valid only when the front panel is removed.

The security indicator lights when the removable face plate is taken off. (See page 51.) The security indicator can be turned off. (Default: LED ON)

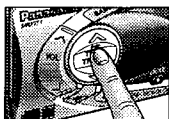
- ① Press **SEL** in the function setting mode to change to "S-LED SELECT".  
② Press **TRACK** or **TRACK** to switch the security indicator as follows.



\* Press > or < when using a remote control.

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### Title Scroll Setting

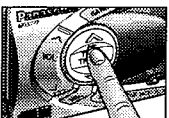
- When the display shows an MD title, the title can be made to move.
- Press **SEL** in the function setting mode to change to "TITLE SCROLL". (See page 41.)
  - Press **TRACK** or **TRACK** to switch the scroll mode as follows.  
(Default: TITLE SCROLL ON)

Scroll on : MD title moves.

Scroll off : MD title stops moving.

\* Press **>** or **<** when using a remote control.

**Note:**  
Press and hold **DISP** for more 2 seconds, the display can be scrolled one cycle only, when the MD title scroll is off.



### Spectrum Analyzer Speed Setting

- Press **SEL** in the function setting mode to change to "SPEANA SPEED".
- Press **TRACK** or **TRACK** to switch the spectrum analyzer speed as follows.  
(Default: FAST)

FAST : Spectrum Analyzer display moves fast.

SLOW : Spectrum Analyzer display moves slowly.

\* Press **>** or **<** when using a remote control.

## Remote Control Basics

### Battery Replacement:

#### 1. Remove the battery case.

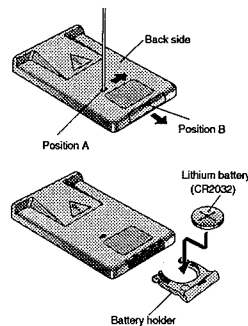
Pull the case by the Position B after pushing Position A with inserting a slender and strong stick into the slot in the directions indicated by the each arrow.

#### 2. Replace the battery.

Set a new battery properly with side up as illustrated.

#### 3. Insert the battery holder.

Push in the holder to the original position.



### Note on Batteries:

Old battery must immediately be removed and disposed.

Battery Information:

- Designated Battery: Panasonic Lithium Battery (CR2032)
- Battery Life: 6 months with normal use (in normal room temperature)

#### Caution:

Improper use of batteries may cause overheating, explosion or ignition, resulting in injury or fire. Battery leakage may cause damage to the unit.

- Do not disassemble or short the batteries. Do not throw the batteries into a fire.
- To avoid the risk of accident, keep the batteries out of reach of children.

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## Remote Control Basics (Continued)

In using the remote control, operate it in the same way as you operate the control panel, but remember the following.

No DIMMER button on remote control. (For the dimmer function, use the control panel.)

#### Note:

The remote control does not operate if the control panel is open or removed.

Aim the remote control at the sensor of your unit. (See page 7)

- 1, DISC  $\checkmark$ , NARROW Button
- 2, DISC  $\wedge$ , WIDE Button
- 3, Button
- 4, R (RANDOM) Button
- 5, SCAN Button
- 6, REP (REPEAT) Button

PWR (Power), SOURCE Button (Press any of them to switch on the power.)

- AM / FM Button (BAND, APM)
- CD, AUX IN Button (AUX IN : press more than 2 seconds)
- CH-C (Changer Control) Button
- MD Button

TUNE  $\wedge$   $\vee$ , TRACK  $\blacktriangleright$   $\blacktriangleleft$  Button

S-A (Spectrum Analyzer) Button

VOL (Volume)  $\wedge$   $\vee$  Button

MUTE (MONO/LOCAL) Button

DISP (Display), CLOCK Button

SEL (Select) Button

OFF Button

Only for Remote Control  
For the operation panel, press and hold PWR for more than 1 second.

$\wedge$   $\vee$ ,  $\blacktriangleright$   $\blacktriangleleft$  Button

Only for Remote Control  
For the operation panel, VOL  $\wedge$   $\vee$ , TRACK  $\blacktriangleright$  and TRACK  $\blacktriangleleft$  are applied.

SPC (Space), SUB - W (Sub-woofer) Button

## Installation Guide



### WARNING

This installation information is designed for experienced installers and is not intended for non-technical individuals. It does not contain warnings or caution of potential dangers in attempting to install this product.

Any attempt to install this product in a motor vehicle by anyone other than qualified installer could cause damage to the electrical system and could result in serious personal injury or death.

### Overview

This equipment should be installed by a professional. However, if you plan to install this unit yourself, your first step is to decide where to install it. The instructions in these pages will guide you through the remaining steps: (Please refer to "WARNING" statement above).

- Identify and label the vehicle wires
- Connect the vehicle wires to the wires of the power connector
- Install the unit in the dash
- Check the operation of the unit

If you do encounter problems, please consult your nearest professional installer.

**Caution:** This unit will operate with a 12 V DC negative ground auto battery system only. Do not attempt to use it in any other systems. Doing so could cause serious damage.

Before you begin installation, look for the following items included in the packing with your unit.

- Warranty Card**  
Fill this out promptly
- Panasonic Servicenter for service Directory**  
Keep this for future reference in case the unit needs servicing
- Installation Hardware**  
Needed for in-dash installation

### Installation Hardware

No.	Item	Diagram	Qty
①	Mounting Collar		1
②	Hex. Nut (5 mm $\phi$ )		1
③	Rear Support Strap		1
④	Tapping Screw (5 mm $\times$ 15 mm)		1
⑤	Mounting Bolt (5 mm $\phi$ )		1
⑥	Power Connector		1
⑦	Removable Face Plate Case		1
⑧	Remote Control Unit		1
⑨	Trim Plate		1
⑩	Lithium battery		1

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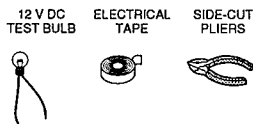
45



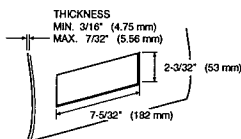
## Installation Guide (Continued)

### Required Tools

You'll need a screwdriver, a 1.5 V AA battery, and the following:



### Dashboard Specifications



### Identify All Leads

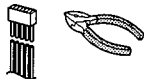
The first step in installation is to identify all the vehicle wires you'll use when hooking up your sound system.

As you identify each wire, we suggest that you label it using masking tape and a permanent marker. This will help avoid confusion when making connections later.

**Note:** Do not connect the power connector to the stereo unit until you have made all connections. If there are no plastic caps on the stereo hooking wires, insulate all exposed leads with electrical tape until you are ready to use them. Identify the leads in the following order.

#### Power Lead

If your vehicle has a radio or is pre-wired for one: Cut the connector wires one at a time from the plug (leaving the leads as long as possible) so that you can work with individual leads.



Turn the ignition on to the accessory position, and ground one lead of the test bulb to the chassis. Touch the other lead of the test bulb to each of the exposed wires from the cut radio connector plug. Touch one wire at a time until you find the outlet that causes the test bulb to light.

Now turn the ignition off and then on. If the bulb also turns off and on, that outlet is the vehicle power lead.

If your vehicle is not wired for an audio unit: Go to the fuse block and find the fuse port for radio (RADIO), accessory (ACC), or ignition (IGN).

#### Battery Lead

If your stereo unit has a yellow lead, you will need to locate the car's battery lead. Otherwise you may ignore this procedure. (The yellow battery lead provides continuous power to maintain a clock, memory storage, or other function.)

If your vehicle has a radio or is pre-wired for one: With the ignition and headlights off, identify the car battery lead by grounding one lead of the test bulb to the chassis and checking the remaining exposed wires from the cut radio connector plug.

If your vehicle is not wired for an audio unit: Go to the fuse block and find the fuse port for the battery, usually marked BAT.

#### Speakers

Identify the car speaker leads. There will be two leads for each speaker, usually color coded.

A handy way to identify the speaker leads and the speaker they connect with is to test the leads using a 1.5 V AA battery as follows. Hold one lead against one pole of the battery and stroke the other lead across the other pole. You will hear a scraping sound in a speaker if you are holding a speaker lead.

If not, keep testing different lead combinations until you have located all the speaker leads. When you label them, include the speaker location for each.

#### Antenna Motor

If your vehicle is equipped with an automatic power antenna, identify the vehicle motor antenna lead by connecting one bulb tester lead to the vehicle battery lead and touching the remaining exposed wires from the cut radio connector plug one at a time. You will hear the antenna motor activate when you touch the correct wire.

#### Antenna

The antenna lead is a thick, black wire with a metal plug at the end.

### Connect All Leads

Now that you have identified all the wires in the vehicle, you're ready to begin connecting them to the stereo unit wires. The connection diagram on Pages 52 to 53 show the proper connections and color coding of the leads.

We strongly recommend that you test the unit before making a final installation.

You can set the unit on the floor and make temporary connections to test the unit. Use electrical tape to cover all exposed wires.

**Important:** Connect the red power lead last, after you have made and insulated all other connections.

#### Ground

Connect the black ground lead of the power connector to the metal vehicle chassis.

#### Speakers

Connect the speaker wires. See the wiring diagram for the proper hookups. Follow the diagram carefully to avoid damaging the speakers and the stereo unit.

The speaker used must be able to handle more than 40 W of audio power. If using an optional audio power, the speakers should be able to handle the maximum amplifier output power. Speakers with low input ratings can be damaged.

Speaker impedance should measure 4 - 8 Ohms which is typically marked on most speakers. Lower or higher impedance speakers will affect output and can cause both speaker and stereo unit damage.

**Caution:** Never ground the speaker cords. For example, do not use a chassis ground system or a three-wire speaker common system. Each speaker must be connected separately using parallel insulated wires. If in doubt about how your car's speakers are wired, please consult with your nearest professional installer.

#### Motor Antenna

Connect the vehicle motor antenna lead to the blue motor antenna relay control lead.

#### Battery

Connect the yellow battery lead to the correct radio wire or to the battery fuse port on the fuse block.

#### Antenna

Connect the antenna by plugging the antenna lead into the antenna receptacle.

#### Equipment

Connect any optional equipment such as amplifier, according to the instructions furnished with the equipment. Keep about 12 inches (30 cm) of distance between the speaker cords/amplifier unit and the antenna/antenna extension cord. Read the operating and installation instructions for any equipment you will connect to this unit.

#### Power

Connect the red power lead to the correct vehicle radio wire or to the appropriate fuse port on the fuse block.

If the stereo unit functions properly with all these connections made, disconnect the wires and proceed to the final installation.

### Final Installation

#### Lead Connections

Connect all wires, making sure that each connection is insulated and secure. Bundle all loose wires and fasten them with tape so they won't fall down later. Now insert the stereo unit into the mounting collar.

Congratulations! After making a few final checks, you're ready to enjoy your new auto stereo system.

### Final Checks

1. Make sure that all wires are properly connected and insulated.
2. Make sure that the stereo unit is securely held in the mounting collar.
3. Turn on the ignition to check the unit for proper operation.

If you have difficulties, consult your nearest authorized professional installer for assistance.

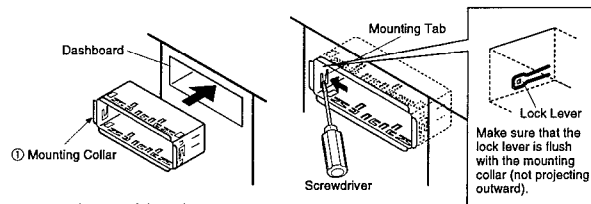
## Installation Guide (Continued)

### Installation Procedures

**Note:** Disconnect the cable from the negative (-) battery terminal.

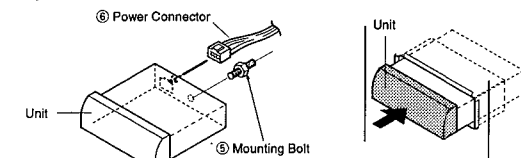
#### 1. Secure the Mounting Collar ①.

Insert Mounting Collar ① into the dashboard, and bend mounting tabs outward with a screwdriver.



#### 2. Secure the rear of the unit.

- a) Check the electrical connection by referring to these operating instructions.
- b) Connect the Mounting Bolt ⑤, using a suitable wrench.
- c) Insert Power Connector ⑥ to the unit.



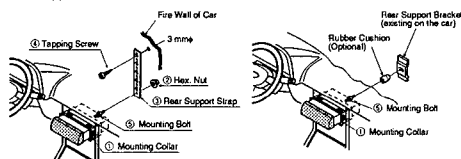
- d) Insert the unit into Mounting Collar ① and push it in until "click" is heard.
- e) Secure the rear of the unit to the car by either of the two recommended methods.

#### Using the Rear Support Strap ③

Affix one end of the Rear Support Strap ③ to the rear of the unit, and the other end to the Fire Wall of Car, or some other metallic area.

#### Using the Rubber Cushion (Optional)

(If there is an existing Rear Support Bracket on the Fire Wall of Car.) Cover Mounting Bolt ⑤ on the rear of the unit with Rubber Cushion, and mount it into the existing Rear Support Bracket.

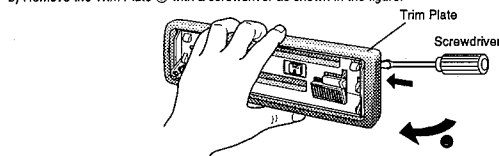


#### 3. Insert the Trim plate ⑨.

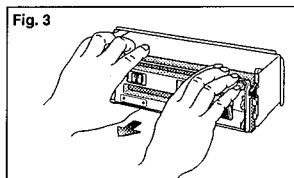
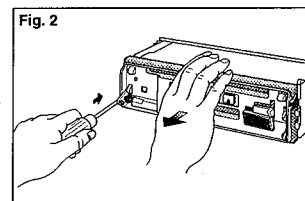
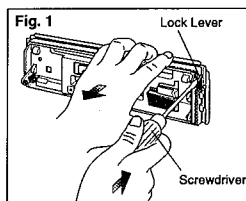
#### 4. After installation reconnect the negative (-) battery terminal.

#### To Remove the Unit

- a) Remove the removable face plate. (See page 50.)
- b) Remove the Trim Plate ⑨ with a screwdriver as shown in the figure.



- c) Pull out the unit while pushing two lock levers using a screwdriver.
- d) Remove the unit pulling with both hands.



# Installation Guide (Continued)

## Anti-Theft System

This unit is equipped with a removable face plate. By removing this face plate, the radio becomes totally inoperable. The security indicator will blink.

### To Remove the Removable Face Plate

- Switch off the power.
- Press OPEN to open the removable face plate.

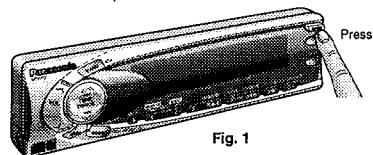


Fig. 1

- Push the face plate to either right or left, then pull it out toward yourself.

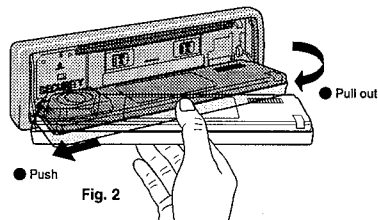


Fig. 2

- As shown in Fig. 3, gently push the lower side of the case and open its cover. Keep the removable face plate in the case. Then, you can bring the plate safely.

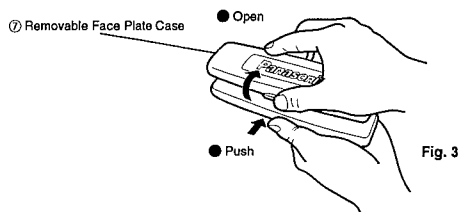


Fig. 3

### To install the Removable Face Plate

- Fit the left hole of the face plate to the left pin of the main unit, then fit the right hole to the right pin.

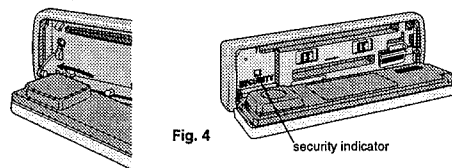


Fig. 4

- After fitting the face plate holes, move the face plate up and down a few times to make sure that it has been placed securely.

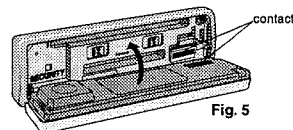


Fig. 5

- Close the front panel and press the right side of face plate until "click" is heard.

### Caution:

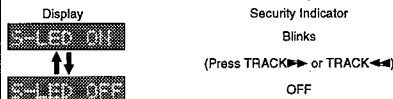
- Before removing the removable face plate, make sure the power is off.
- This removable face plate is not water-proof. Do not expose it to water or excessive moisture.
- Do not remove the removable face plate, while driving your car.
- Do not place the removable face plate on the dashboard or nearby areas where the temperature rises to high levels.
- Do not touch the contacts on the removable face plate or on the main unit, since this may result in poor electrical contacts.
- If dirt or other foreign substances get on the contacts, wipe them with a clean, dry cloth.
- When the front panel is opened, do not force it down and do not put anything on it since these may result in damage to the unit.

### Security Indicator

The security indicator blinks when the removable face plate is removed from the unit.

#### Activate and Security Indicator

Press and hold SEL for more than 2 seconds when the power is on. "S-LED SELECT" is displayed. Press TRACK or TRACK to turn on the security indicator.



## Electrical Connections

### Before Wiring Connection

#### Note:

For installation in cars with trip or navigational computers, all electronic memory settings previously registered in the computer will be lost when the battery terminal is disconnected. Do not disconnect the battery in vehicles equipped with these units. Therefore, extra care should be taken to prevent short-circuits.

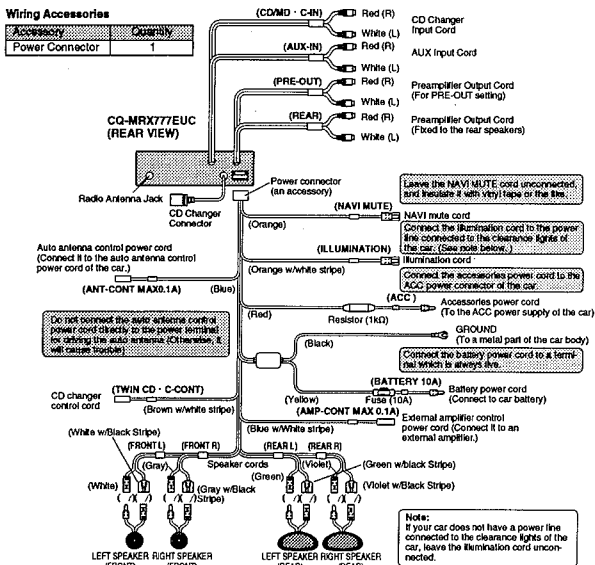
- This unit can be connected to an optional CD changer (CX-DP801EUC and optional extension cord). For details, consult your nearest Panasonic dealers.
- For connection to a CD changer, refer to the operating instructions of the CD changer (CX-DP801EUC).

#### Caution:

- To prevent damage to the unit, be sure to follow the connection diagram as follows.
- Remove about 5 mm of protective covering from the ends of the leads before connecting.
- Do not insert the power connector into the unit until the wiring is completed.
- Be sure to insulate any exposed wires from a possible short-circuit from the car chassis. Bundle all cables and keep cable terminals free from touching any metal parts.

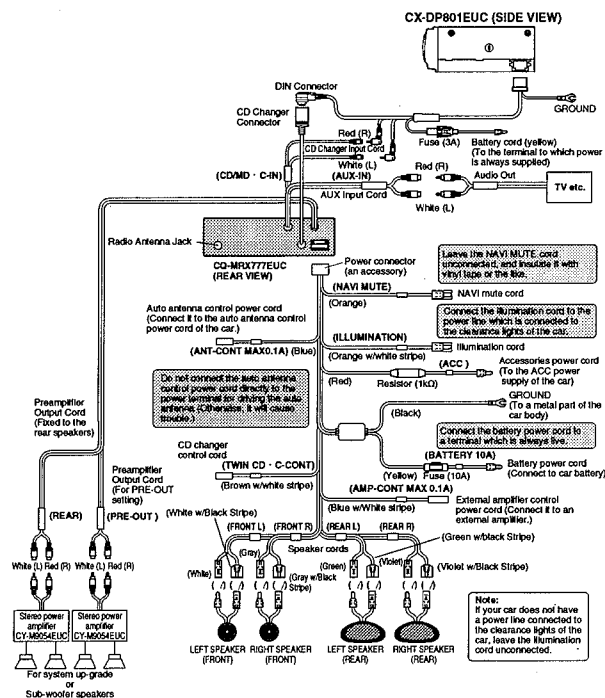
#### Wiring Accessories

Accessory	Quantity
Power Connector	1



### Example: CD Changer and Eight Speakers

- This set can be used for connection to an optional CD changer, for example, Model CX-DP801EUC.



## ■ Error Display Messages (CD/MD Player)

Display	Possible Cause	Problem	Probable Solution
CD - E1 - MD - E1 -	• Disc dirty or wrong side up • Data MD or blank MD	Disc is automatically ejected.	Check the disc.
CD - E2 - MD - E2 -	Disc damaged		
CD - E3 - MD - E3 -	Receiver fails to operate for some cause.	—	Open control panel and press CD $\Delta$ or MD $\Delta$ button. If receiver still does not work, remove control panel, press the reset button on receiver, and place control panel back on. If it still fails to operate normally, ask your dealer or nearest service station for repair.
⊖ PLS EJECT ⊖ PLS EJECT	Attempt is made to start CD or MD before eject is over.	—	Open control panel and press CD $\Delta$ or MD $\Delta$ button.

## ■ Error Display Message (CD Changer)

Display	Possible Cause	Problem	Probable Solution
CD CH - E1 -	Disc dirty or wrong side up	Next disc is automatically selected.	Eject magazine and check the disc.
CD CH - E2 -	Disc damaged		
CD CH - E3 -	Receiver fails to operate for some cause.	—	Press EJECT button on changer. If trouble is unremedied, press the reset button on changer. If trouble still persists, ask your dealer or nearest service station for repair.
NO DISC	No disc at all in magazine	—	Insert discs into magazine.

## Note:

- A number before E1 or E2 indicates the number of an error disc.
- Display contents and operations vary in part from one changer to another (due to the differences in changer specifications). For details, refer to the manual for the changer you are using.

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## ■ Clock

Problem	Possible Cause	Probable Solution
Clock unadjustable	Power is not on.	Press PWR button to switch power on, then adjust.

## ■ Radio

Problem	Possible Cause	Probable Solution
Much noise in FM stereo and monaural broadcasts	Station is too far or signals are too weak.	Tune in to a station emitting strong signals.
Presettings lost from memory	Bad power battery line connection.	Connect battery cables to terminals that are always live.
	Fuse for battery power cables is blown.	Replace it with one of the specified rating.

## ■ CD/MD

Problem	Possible Cause	Probable Solution
CD cannot be inserted.	You are trying to insert another disc when one is already inside.	Eject the one inside before inserting another.
MD cannot be inserted.	You are inserting it in the wrong direction.	Hold it with label side up, and insert it in the correct direction.
CD/MD cannot be ejected.	• CD/MD defective • Mechanical defect	Open control panel and press $\Delta$ button. If CD/MD cannot still be ejected, remove control panel, press RESET switch on receiver, place control panel back on. If trouble is still unremedied, ask your dealer or nearest service station for repair.
No sound after inserting CD/MD	CD/MD inserted wrong side up.	CD/MD inserted wrong side up.
	CD/MD dirty	Clean CD/MD, referring to instructions for CD/MD cleaning.
	Data MD or blank MD	Use a music MD or an MD where music is recorded.
CD/MD sound skip, power sound quality	CD/MD dirty	Clean CD/MD, referring to instructions for CD/MD cleaning.
Sound skip due to vibration	Mounted at an angle of over 30 degrees	Adjust mounting angle to be less than 30 degrees.
	Mounted unsteady	Securely fasten receiver and mounting parts, referring to instructions for installation.

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## Troubleshooting (continued)

## Troubleshooting Tips

## ■ Power

Problem	Possible Cause	Probable Solution
Unit won't turn on.	Dead vehicle battery. Ignition not on.	Charge vehicle battery. Turn ignition to On or Acc.
	Bad each line connection.	Check connections.
	Bad power battery line connection.	Connect battery cables to terminals that are always live.
	Bad Accessory line connection.	Connect accessory power cord with ACC power supply of the car.
	Fuse burned out.	Replace it with one of the specified rating.

## ■ General

Problem	Possible Cause	Probable Solution
No Sounds	Dead vehicle battery. Ignition not on.	Turn ignition to On or Acc.
	Power is not on.	Press PWR button to switch power on before making adjustment.
	Volume is too low.	Raise volume.
	Bad each line connection.	Check connections.
	Bad power battery line connection.	Connect battery cables to terminals that are always live.
	Bad Accessory line connection.	Check connections.
	Bad Ground line connection.	Connect grounding wire to a metal part of car.
	Bad Speaker line connection.	Check connections.
	Bad NAVI MUTE line connection.	Leave the illumination cord unconnected.
	Condensation	Wait for some time before use.
No operation by pressing buttons	Spectrum analyzer display is in demo mode.	Select other than demo mode before operating.

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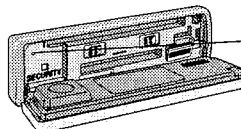
## Troubleshooting (continued)

## ■ Sound Control

Problem	Possible Cause	Probable Solution
No sound from left, right, front, or rear speaker	Left-right, front-rear balance is off.	Properly adjust BAL/FAD.
Only bass sound from rear speaker	SBC-SW type set to cutoff frequency ON.	Set SBC-SW type to cutoff frequency OFF.
No sound from PREOUT	PREOUT volume level set to $\infty$ dB.	Set PREOUT volume level to other than $\infty$ dB.
Right and left sounds reversed in stereo	Speaker wires are connected wrong.	Speaker wires are connected wrong.

## ■ Remote Control

Problem	Possible Cause	Probable Solution
No operation by pressing buttons	Battery inserted in wrong direction.	Insert a battery correctly.
	Battery has run down.	Replace battery.
	Remote control not in correct direction.	Direct the remote control at the REMOTE (Sensor) on the control panel.



## Reset Switch

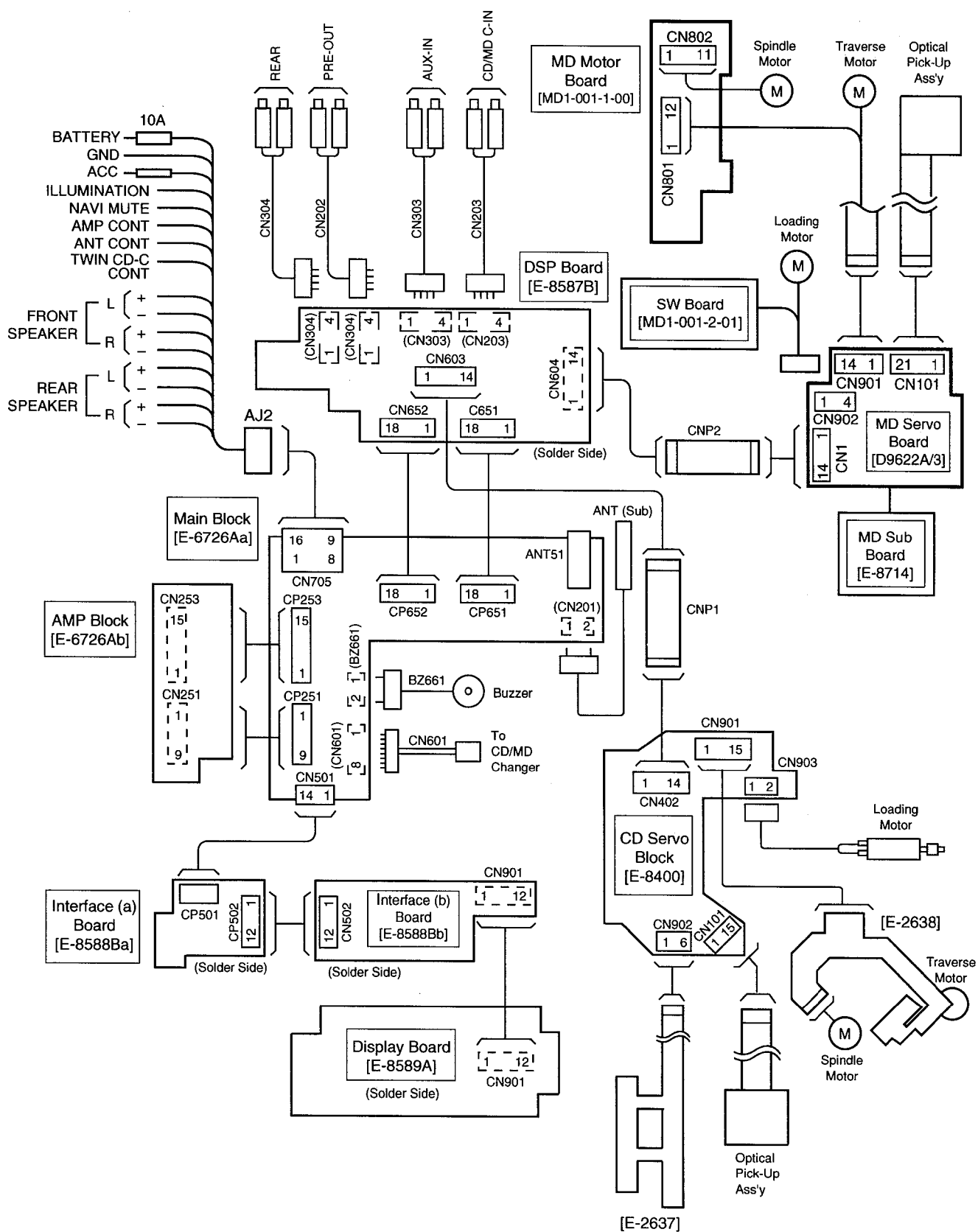
If you press this switch with a tough pointed object, an initial setting is restored after abnormal recovery. However, all memorized settings are canceled at that time.

## Caution:

Press this button when any operation buttons do not function. If the unit does not become restored even after pressing the button, contact your nearest Panasonic Servicecenter for service.

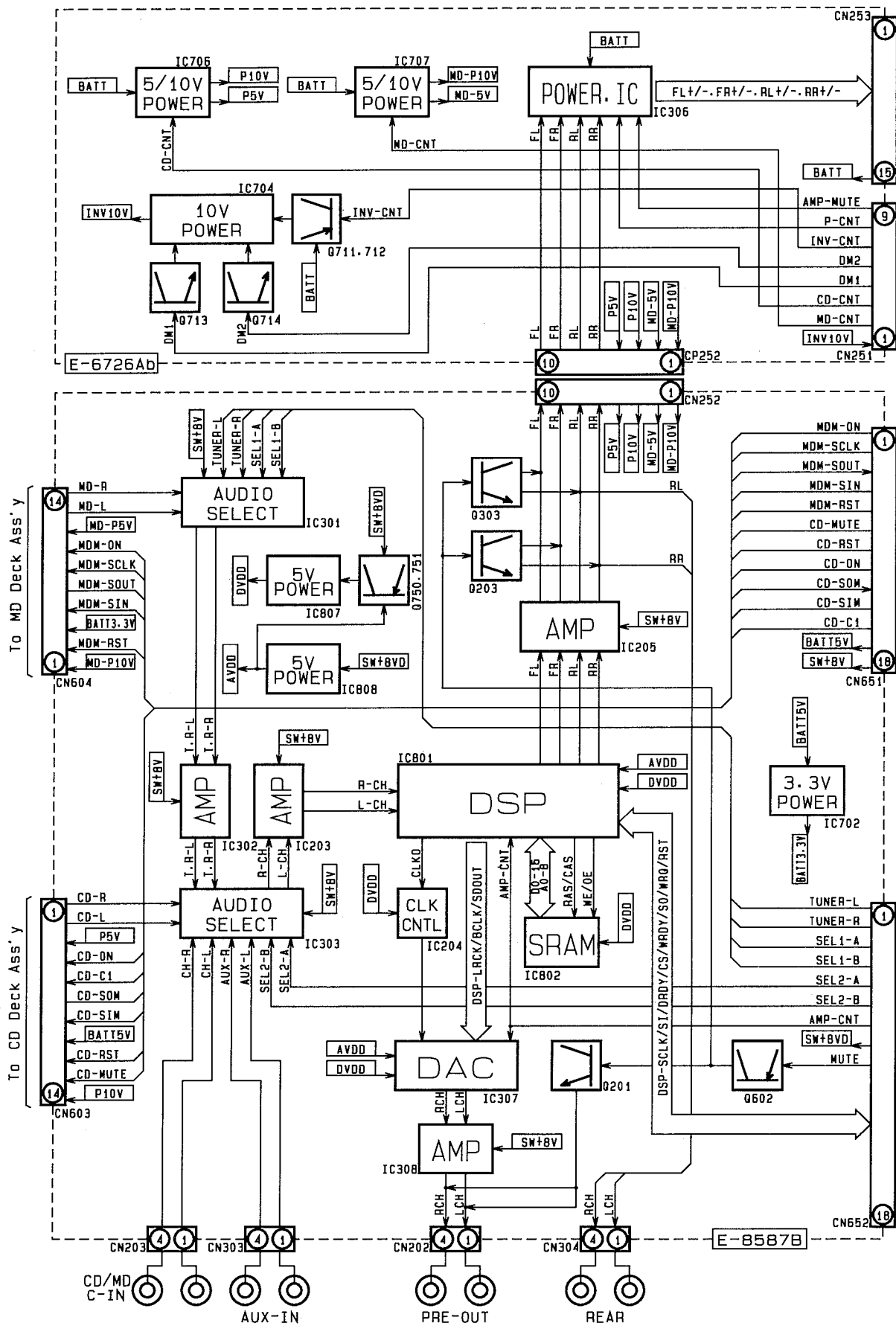
57

## WIRING CONNECTION

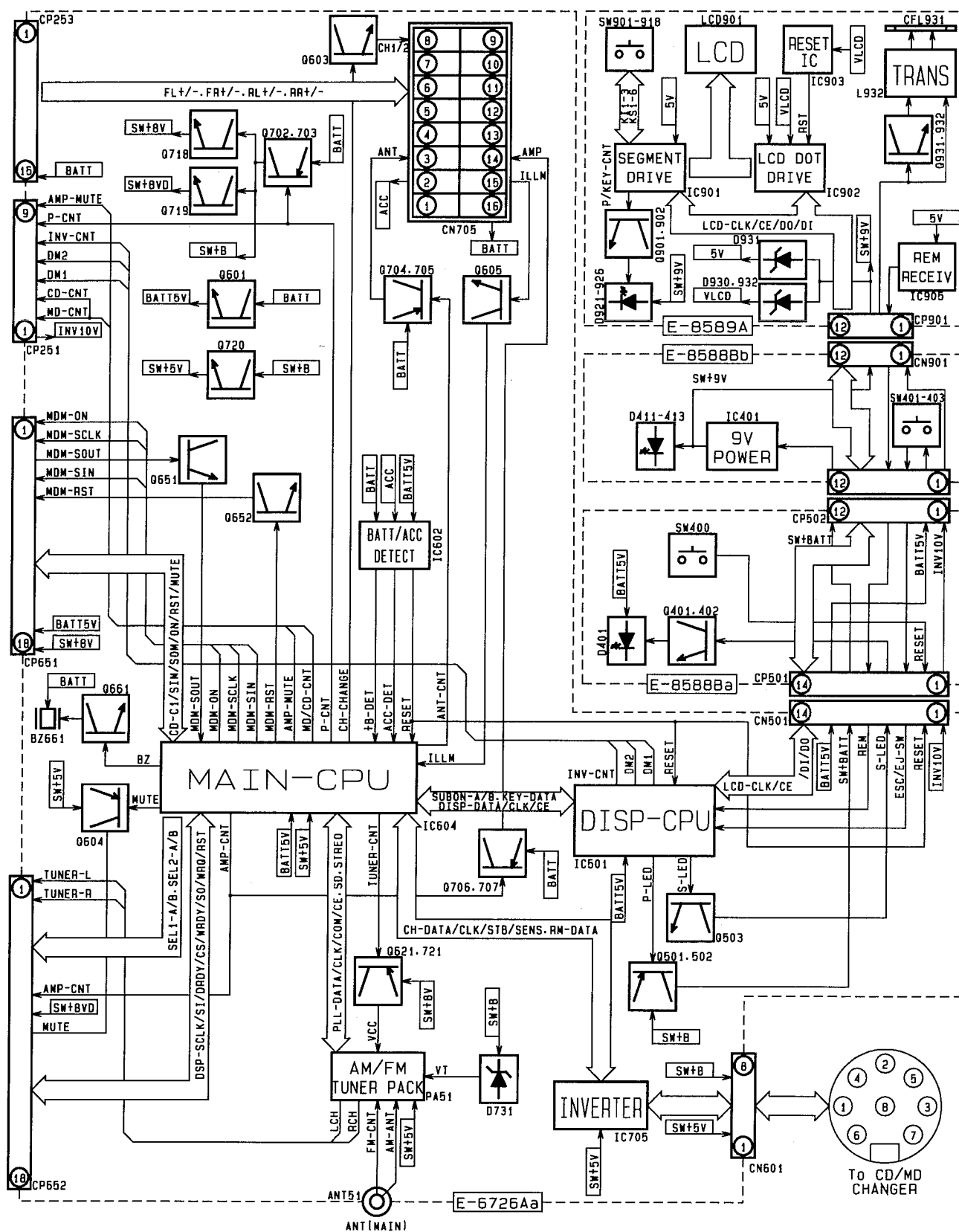




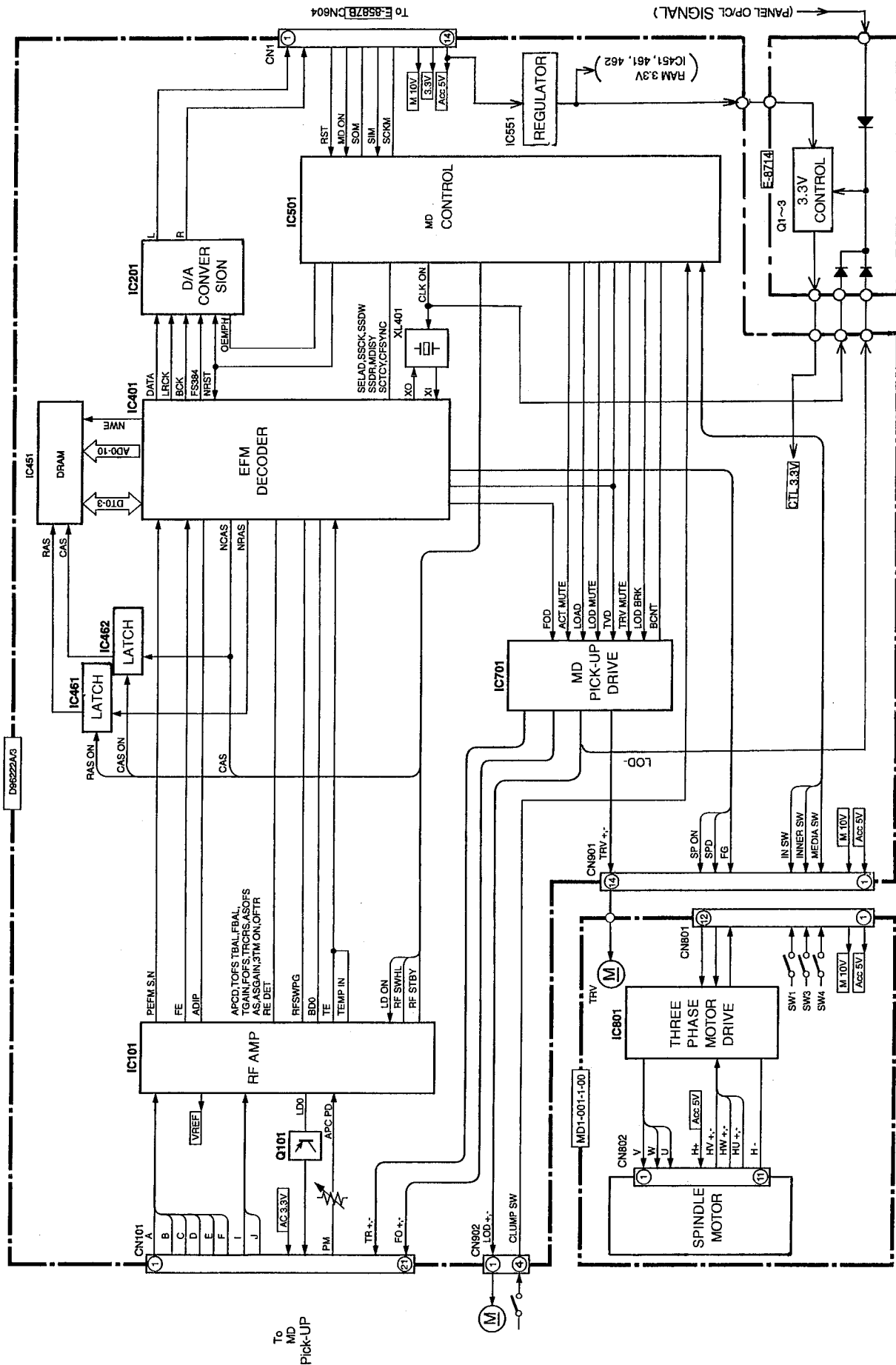
### BLOCK DIAGRAM (DSP/AMP Block)



## BLOCK DIAGRAM (Main / Interface / Display Block)

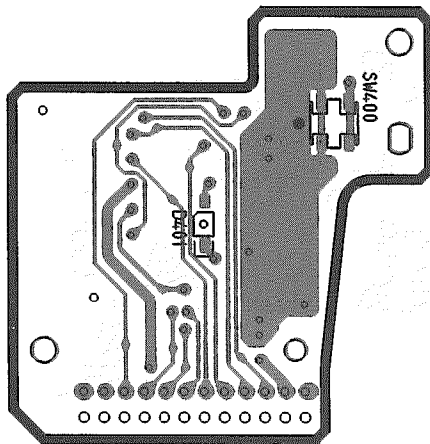


## BLOCK DIAGRAM (MD Servo Block)

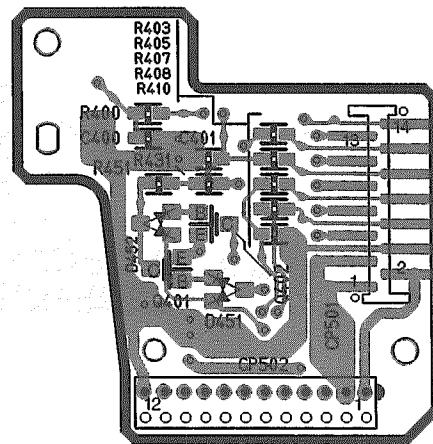




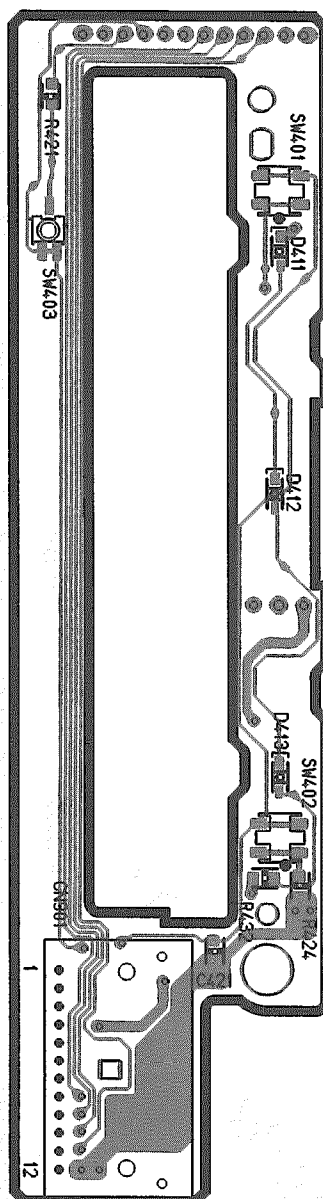
## WIRING DIAGRAM (Interface Block)



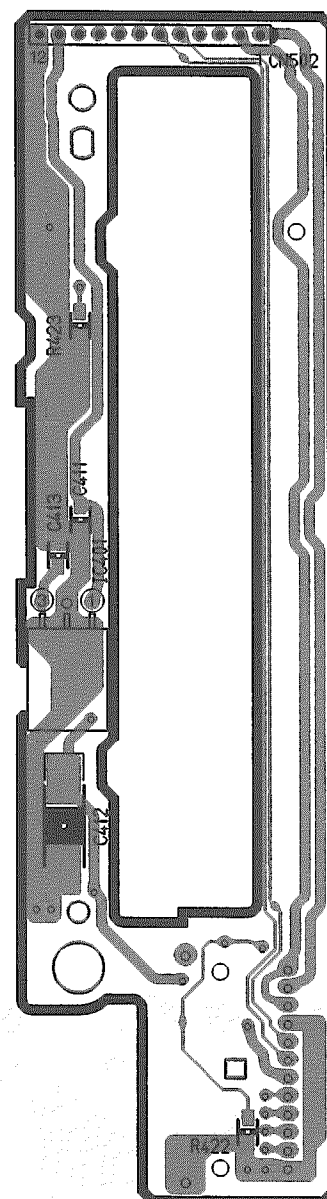
[E-8588Ba] [TOP VIEW]



[E-8588Ba] [BOTTOM VIEW]

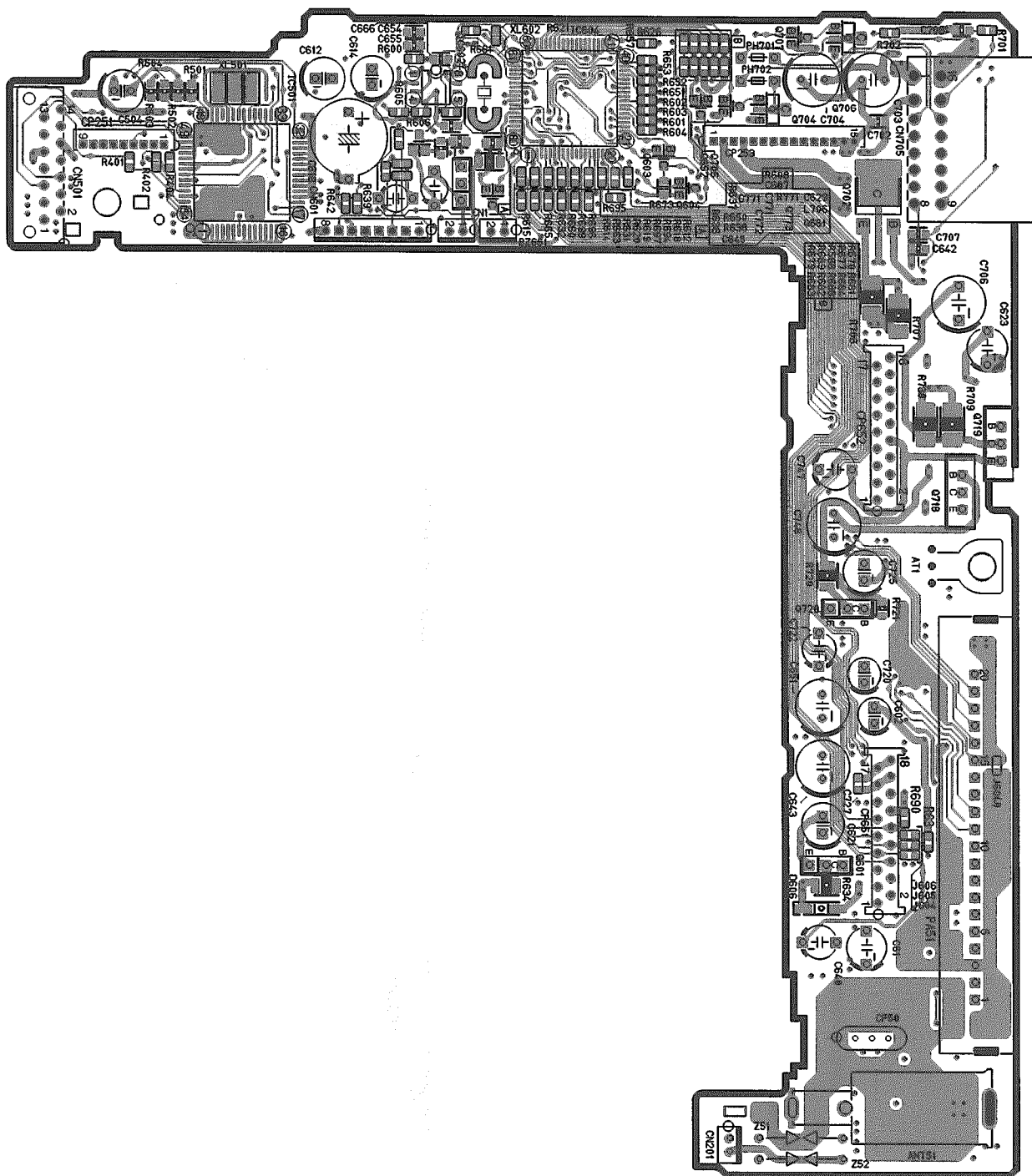


[E-8588Bb] [TOP VIEW]

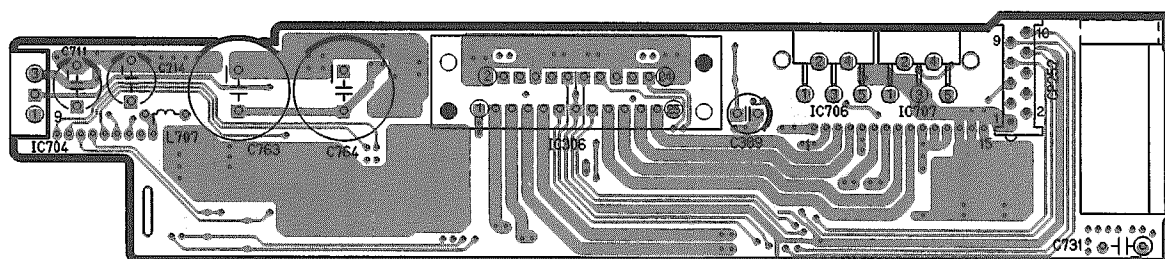


[E-8588Bb] [BOTTOM VIEW]

## WIRING DIAGRAM (Main /AMP Block -1)

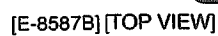


[E-6726Aa] [TOP VIEW]



[E-6726Ab][TOP VIEW]

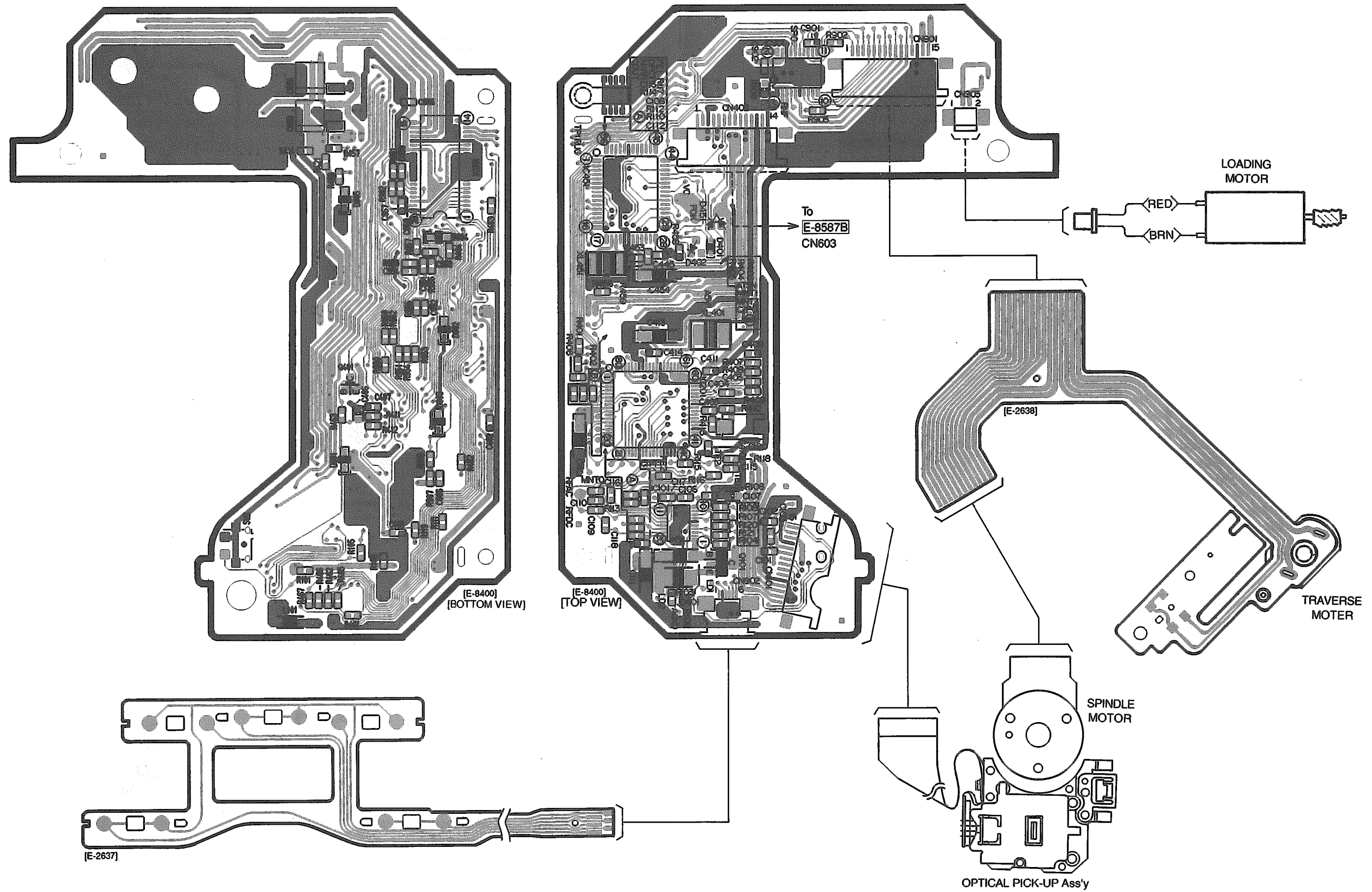


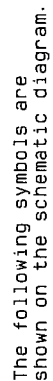


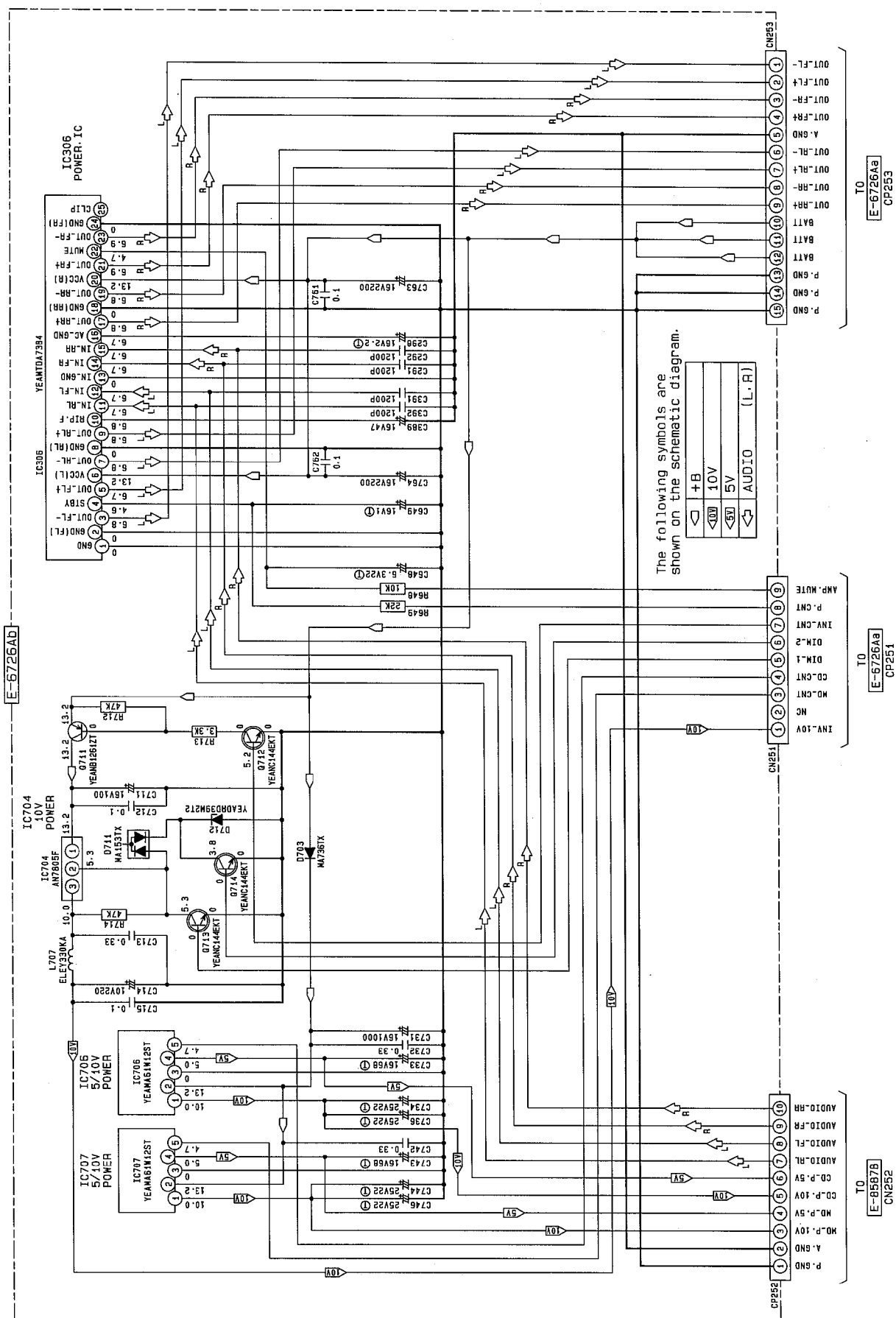




WIRING DIAGRAM (CD Servo Block)

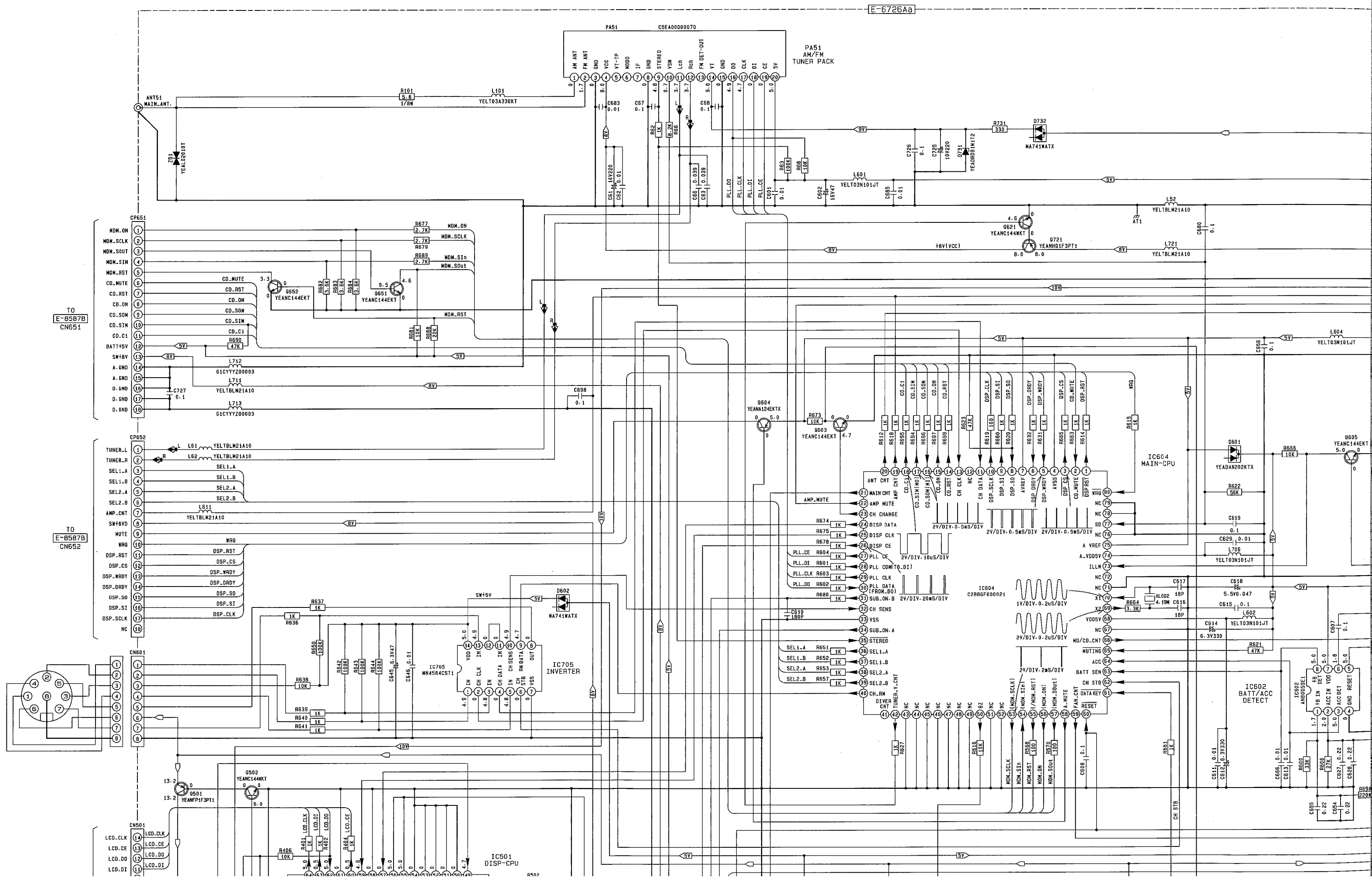








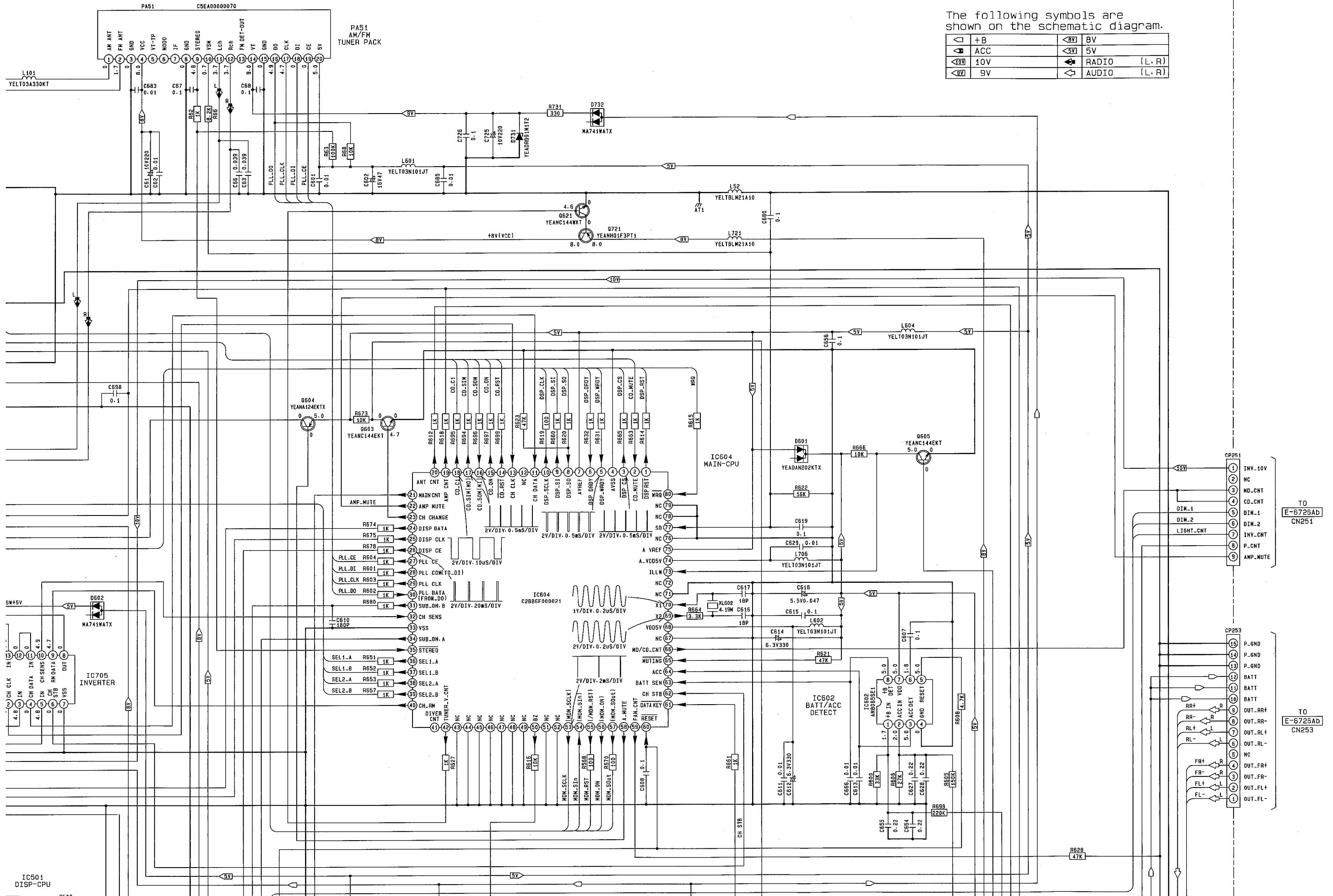
### SCHEMATIC DIAGRAM (Main Block)



E-6726Aa

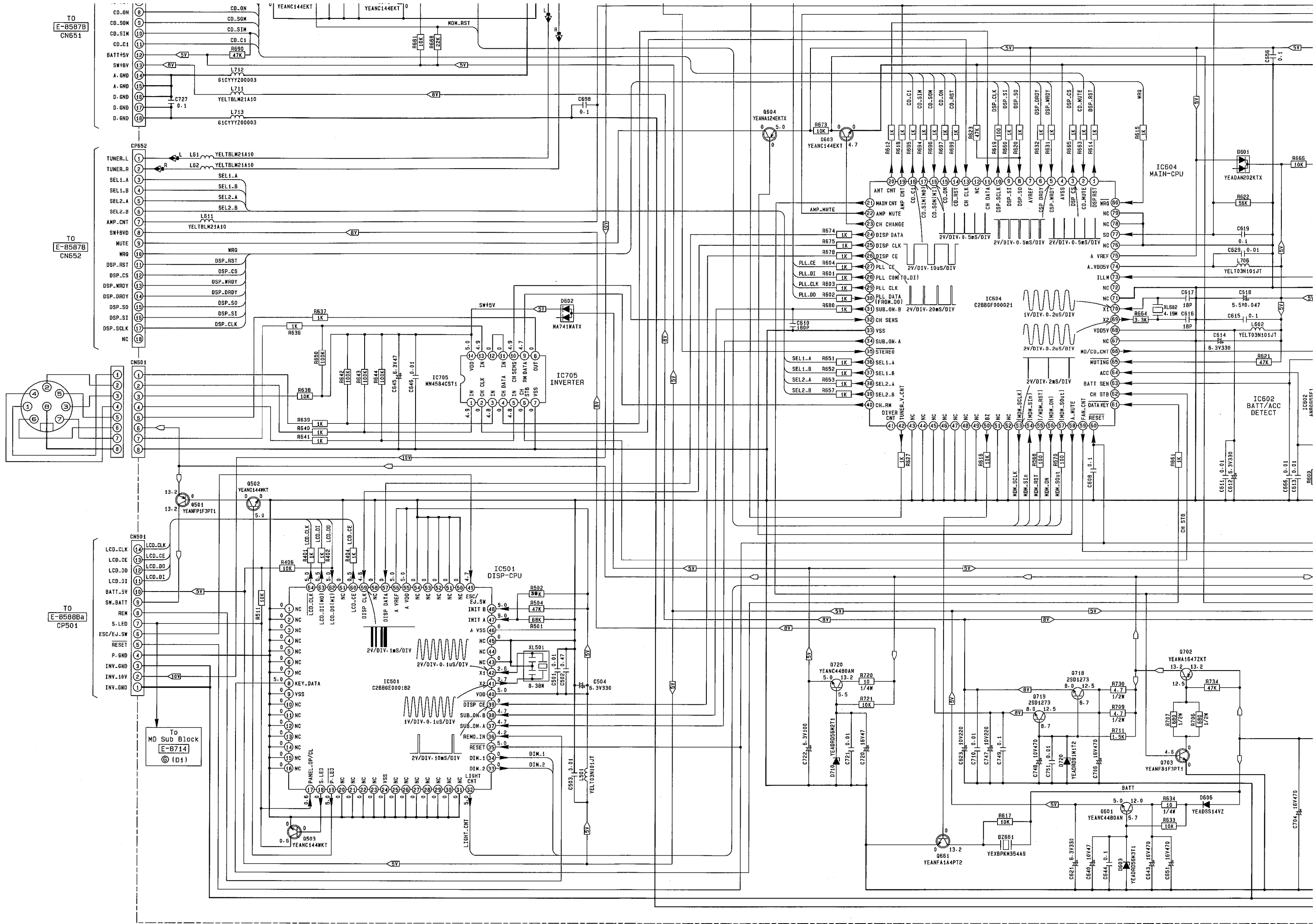
The following symbols are shown on the schematic diagram.

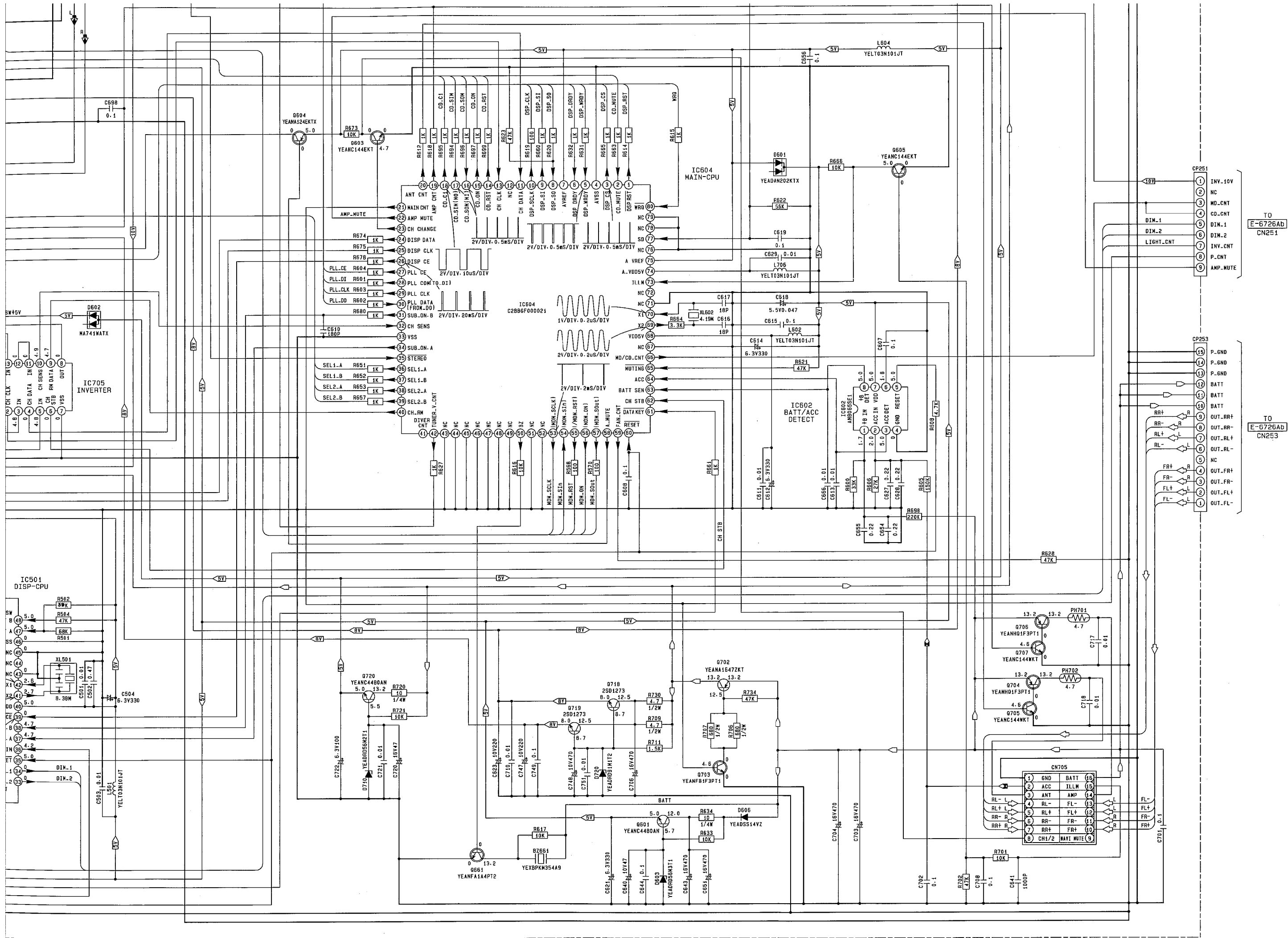
	+B		8V
	ACC		5V
	10V		RADIO (L, R)
	9V		AUDIO (L, R)



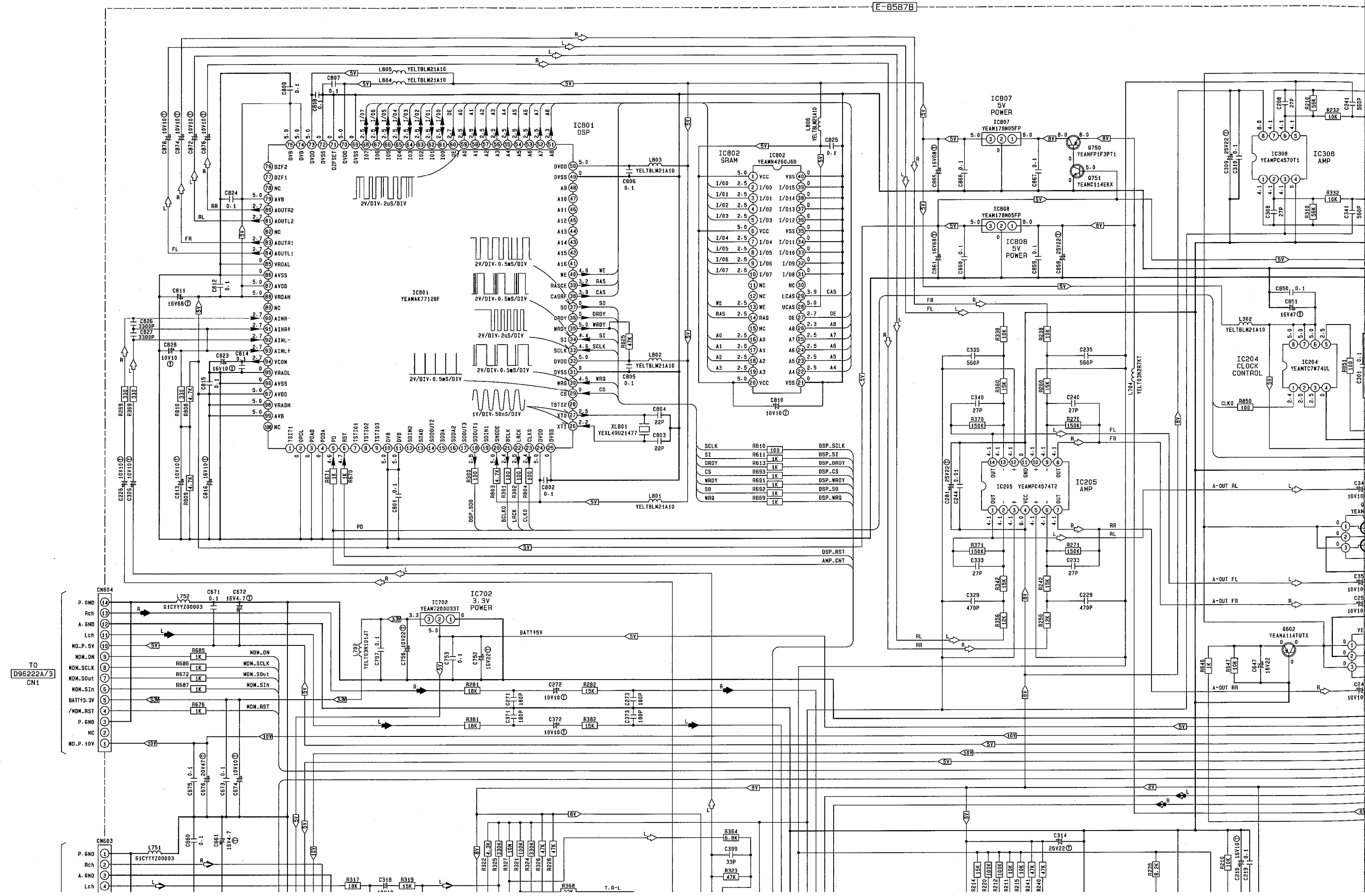
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CN251

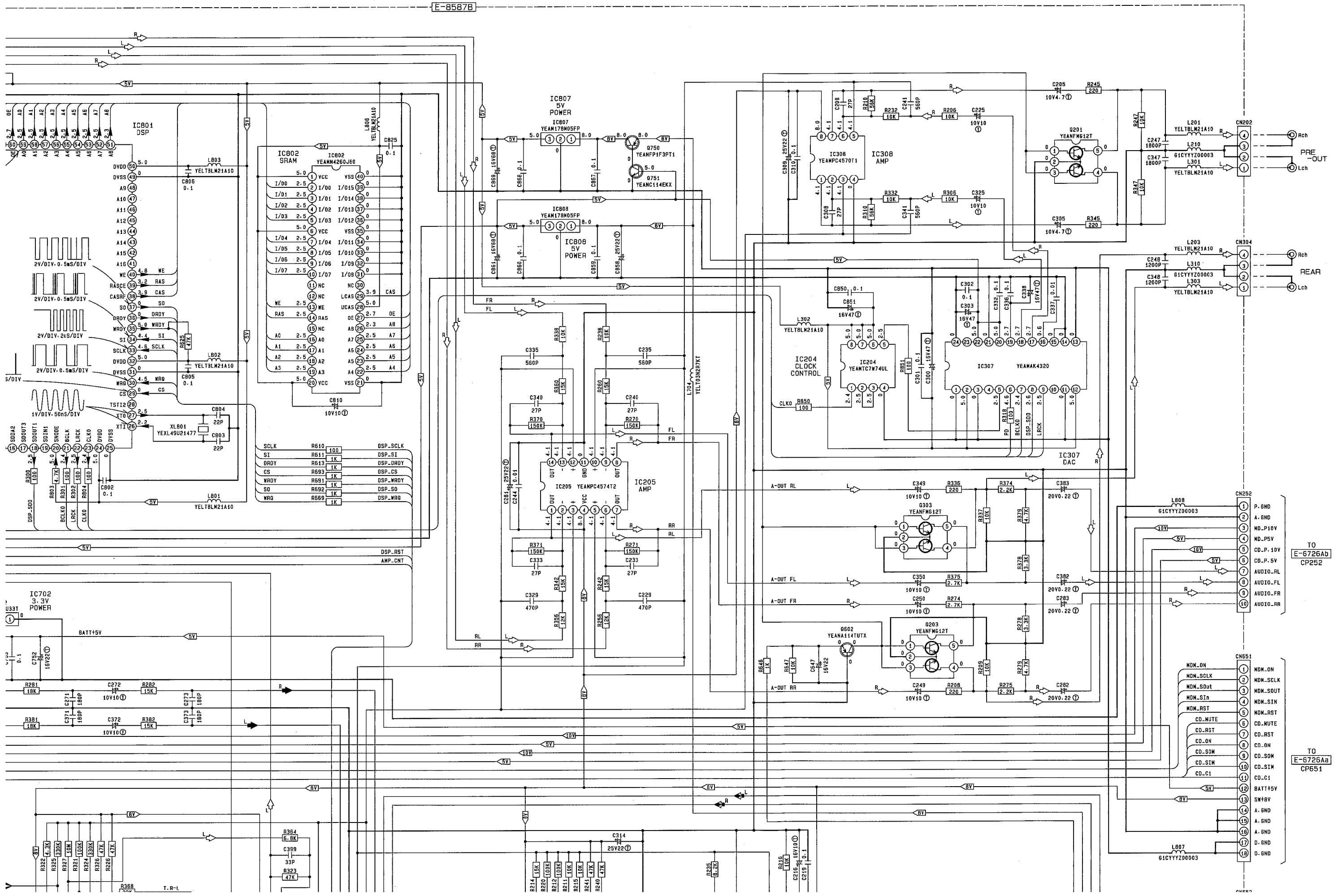
TO  
E-6726Ab  
CN253



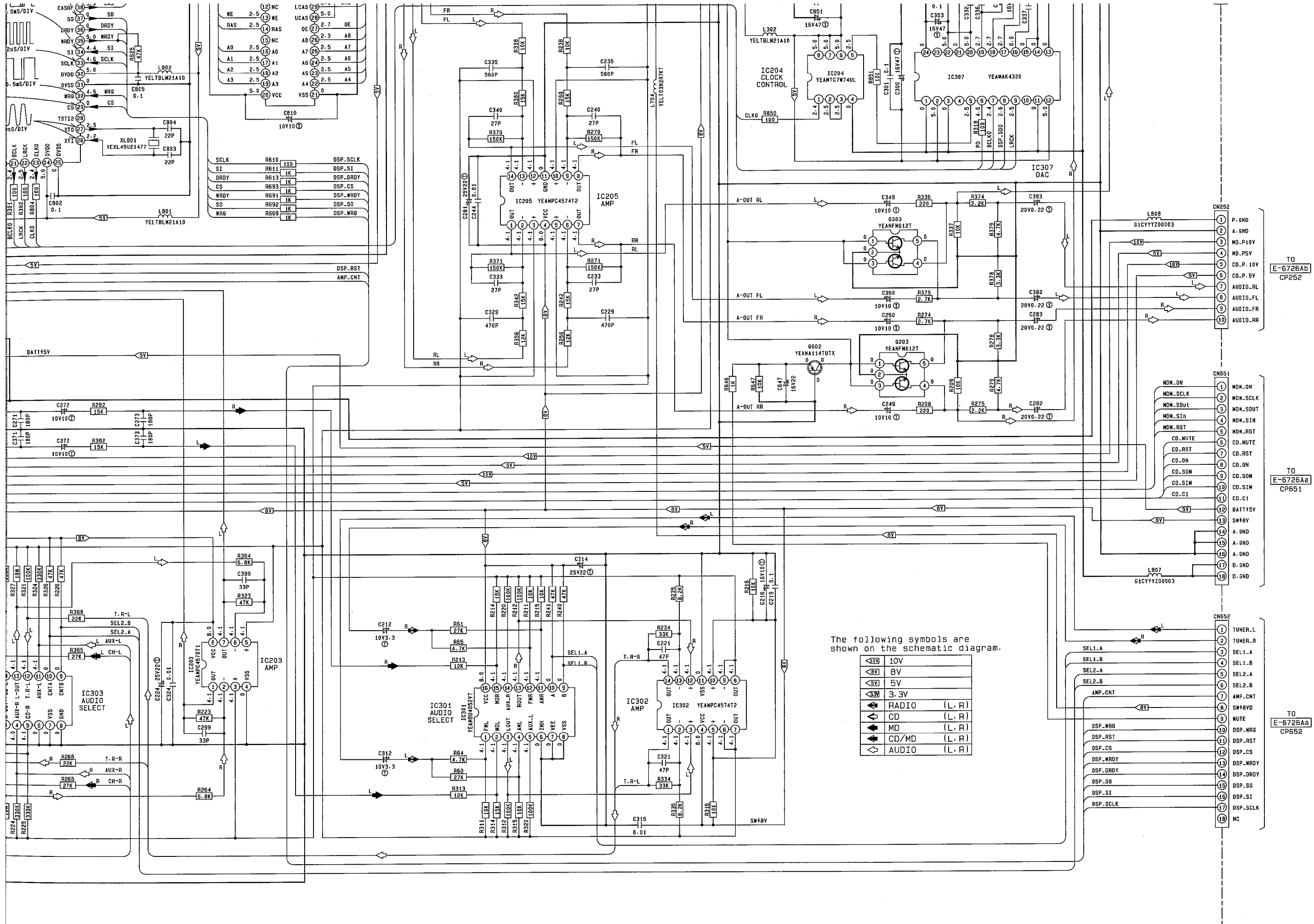


E-8587B



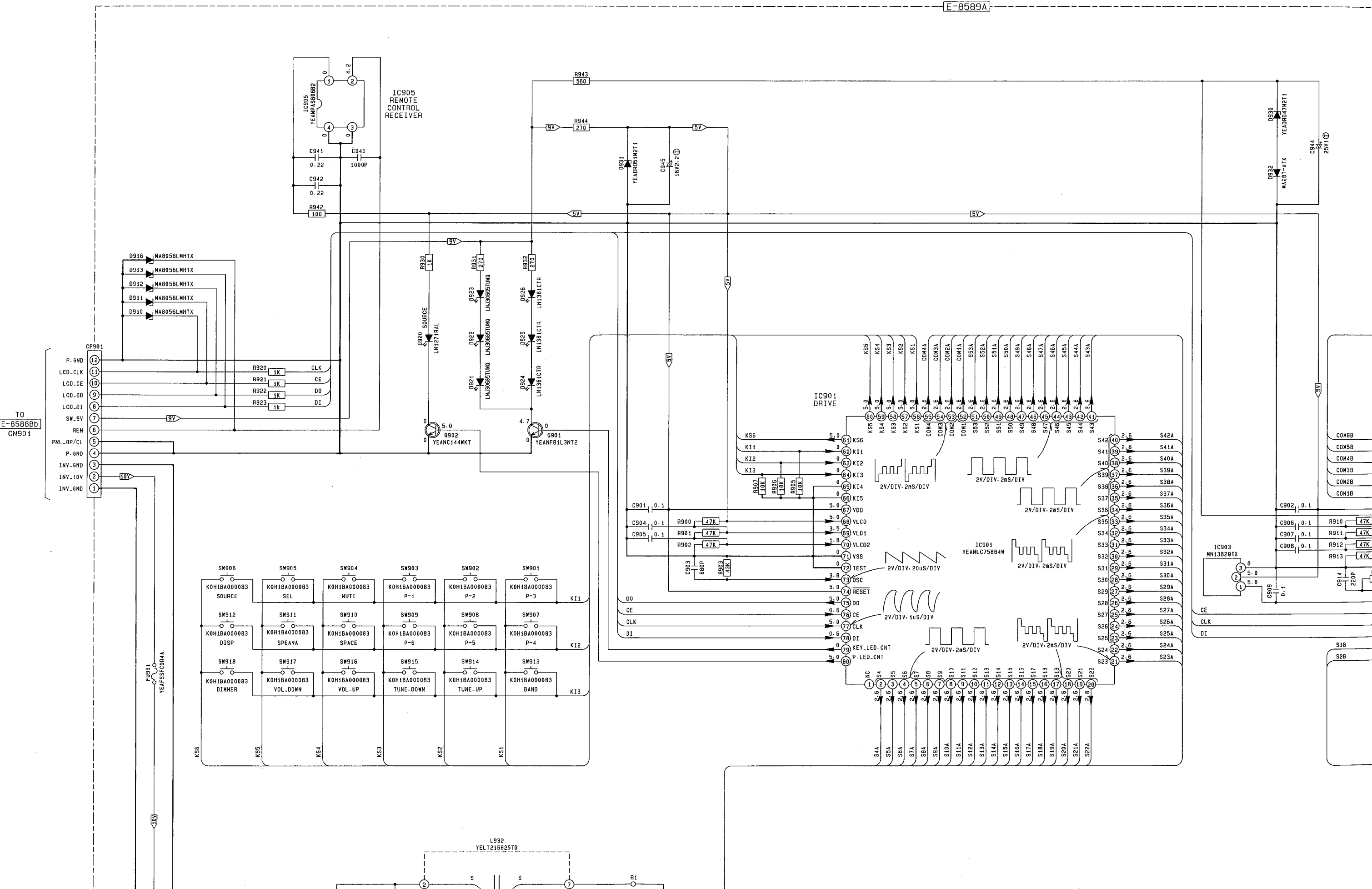


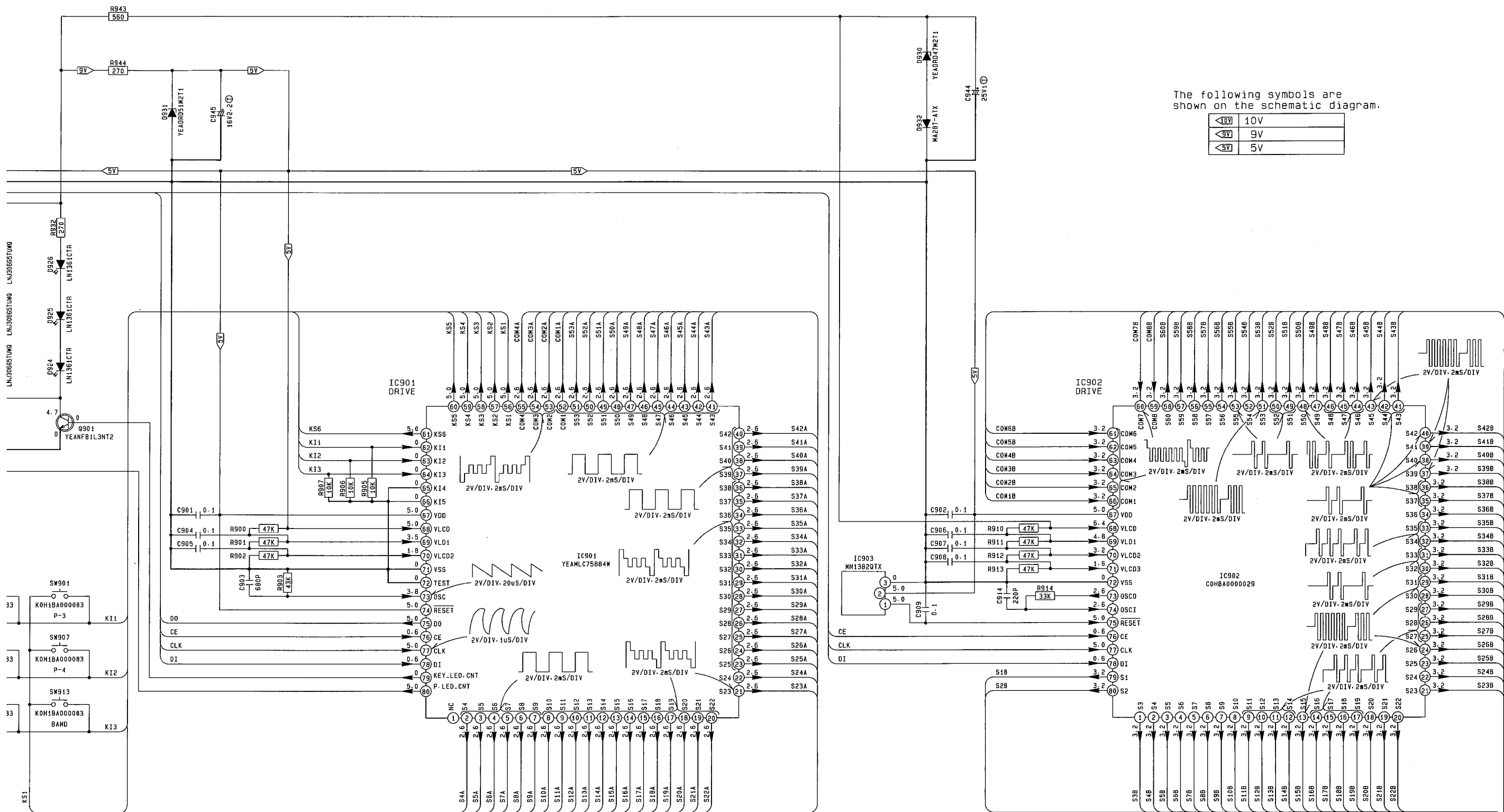




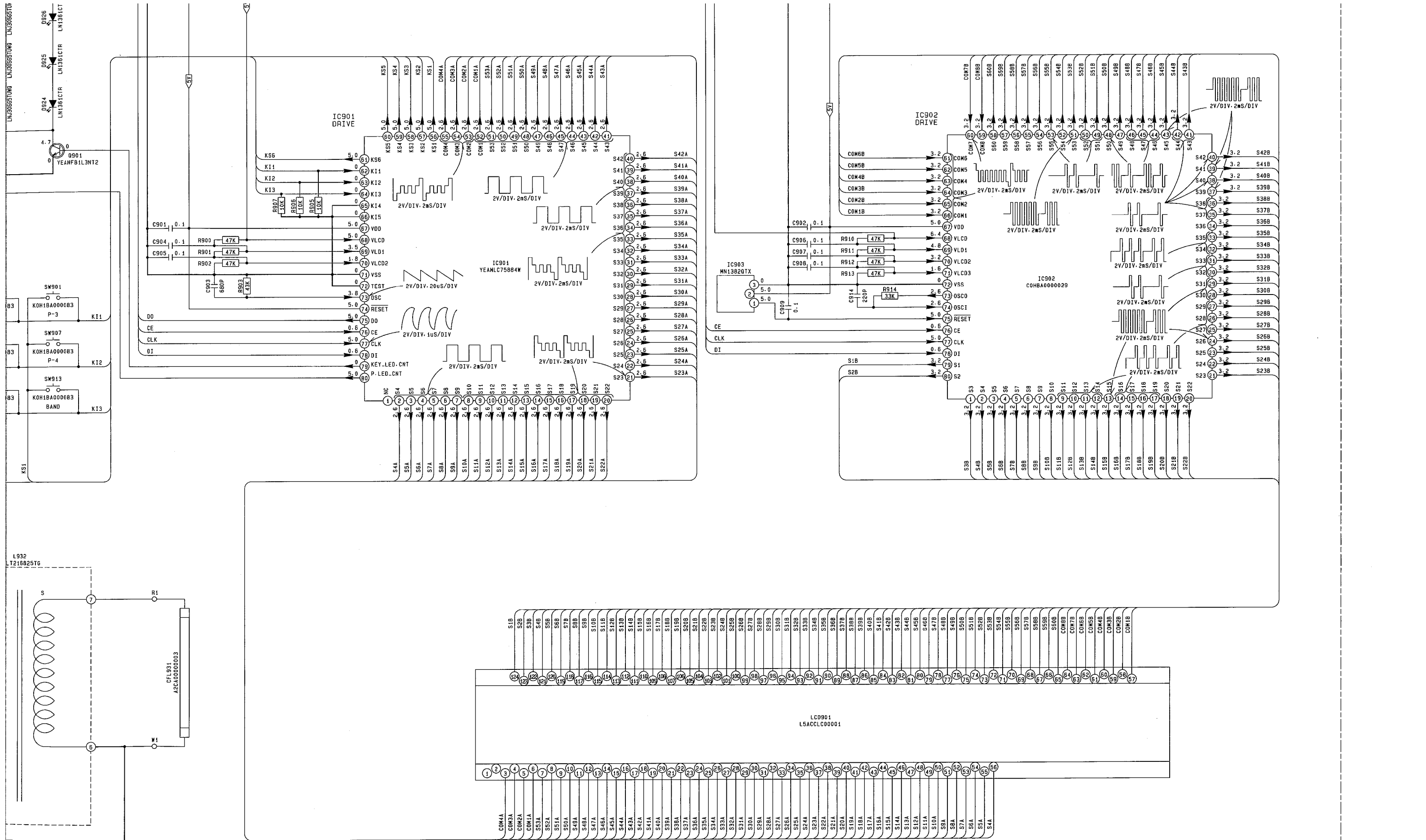


SCHEMATIC DIAGRAM (Display Block)

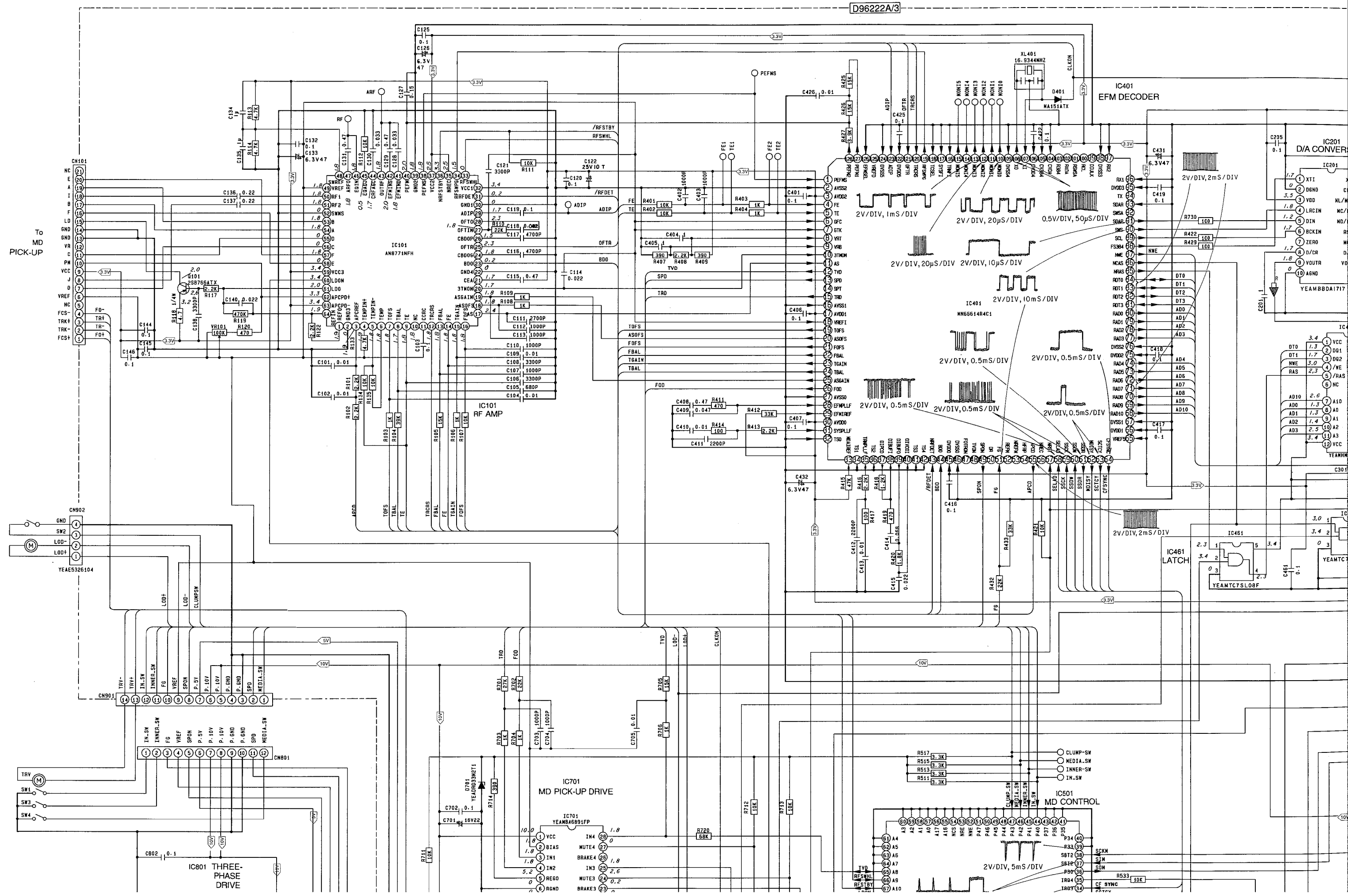




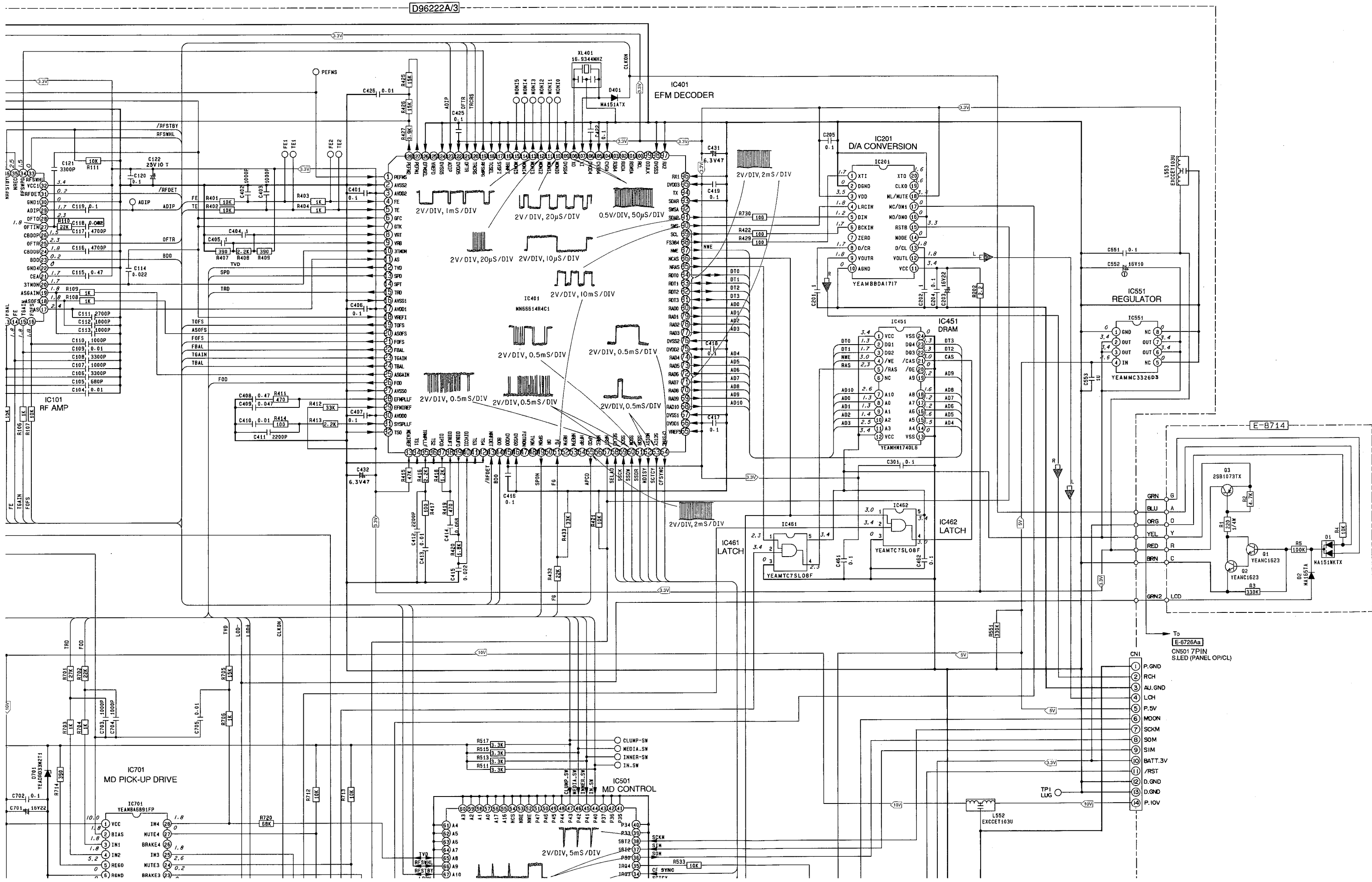




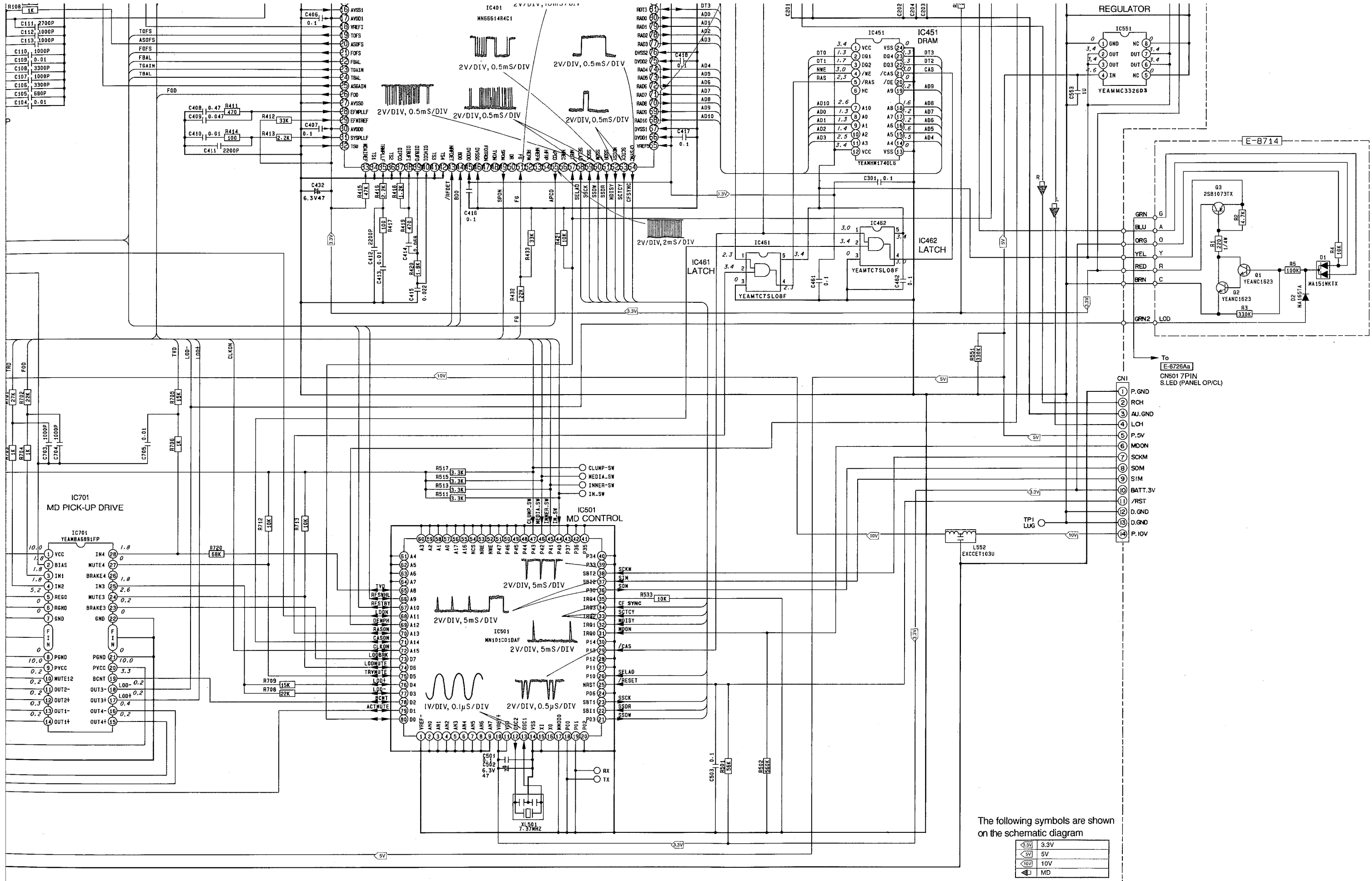
SCHEMATIC DIAGRAM (MD Servo Block)



D96222A/3

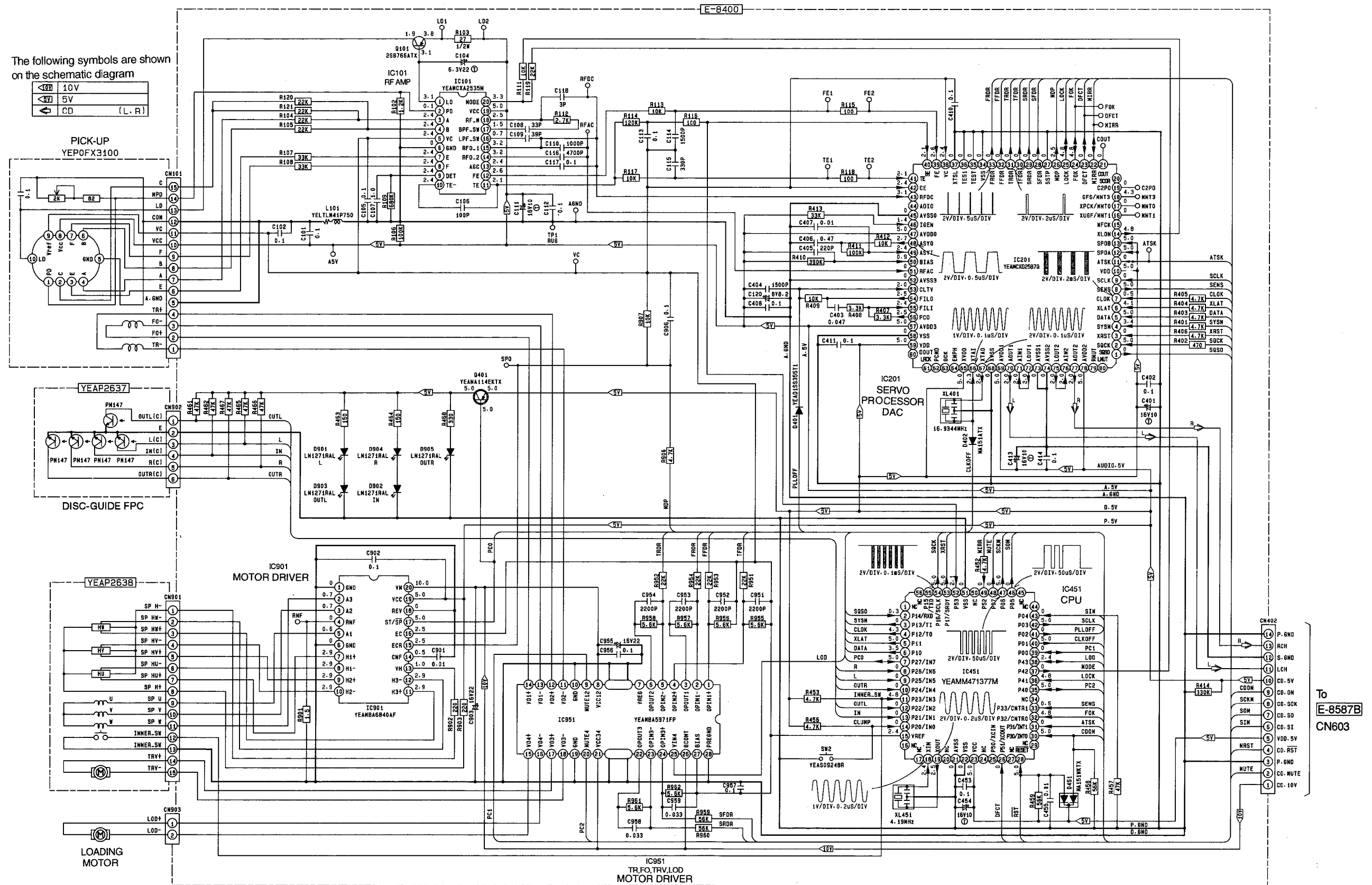








### SCHEMATIC DIAGRAM (CD Servo Block)



## TERMINALS DESCRIPTION (Main Block)

## ■ IC501 G2BBGE000182

Pin No.	Name	Description	I/O	Vol. (V)
1	(NC)	—	—	—
2	(NC)	—	—	—
3	(NC)	—	—	—
4	(NC)	—	—	—
5	(NC)	—	—	—
6	(NC)	—	—	—
7	(NC)	—	—	—
8	(NC)	—	—	—
9	VSS	Connect to Ground	—	0
10	(NC)	—	—	—
11	(NC)	—	—	—
12	(NC)	—	—	—
13	(NC)	—	—	—
14	(NC)	—	—	—
15	(NC)	—	—	—
16	(NC)	—	—	—
17	PANEL OP/CL	Front Panel Open/Close Detect	I	0.8
18	S. LED	S. LED Signal	O	0
19	P. LED	Panel Display Power Control	O	4.8
20	(NC)	—	—	—
21	(NC)	—	—	—
22	(NC)	—	—	—
23	(NC)	—	—	—
24	VSS	Connect to Ground	—	0
25	(NC)	—	—	—
26	(NC)	—	—	—
27	(NC)	—	—	—
28	(NC)	—	—	—
29	(NC)	—	—	—
30	(NC)	—	—	—
31	(NC)	—	—	—
32	LIGHT CNT	Panel Light Power	O	4.8
33	DIM 1	Dimmer 1	O	0
34	DIM 2	Dimmer 2	O	0
35	RESET	System Reset	I	5.0
36	REMO IN	Remote Data	I	4.6
37	SUB ON A	Chip Enable (from Main CPU)	I	4.9
38	SUB ON B	Sub ON (from Main CPU)	I	4.8
39	DISP CE	Display Chip Enable	I	5.0
40	VDD	Connect to VDD5V	—	5.0
41	X2	Main System Clock (8.38MHz)	O	2.7
42	X1	Main System Clock (8.38MHz)	I	2.4
43	(NC)	—	—	—
44	NC(OPEN)	—	—	—
45	(NC)	—	—	—
46	AVSS	Connect to ground	—	0
47	INIT A	Function Select A	I	5.0
48	INIT B	Function Select B	I	5.0
49	ESC/EJ SW	Escusion Remove/Eject SW	I	4.8
50	(NC)	—	—	—
51	(NC)	—	—	—
52	(NC)	—	—	—
53	(NC)	—	—	—
54	(NC)	—	—	—
55	AVDD	Connect to VDD5V	—	5.0
56	AVREF0	Connect to SW5V	—	5.0
57	DISP DATA	Display Data	I	0
58	(NC)	—	—	—
59	DISP CLK	Display Clock	I	5.0
60	LCD CE	LCD Chip Enable	O	0
61	(NC)	—	—	—
62	LCD DO	LCD Data Input	I	4.9
63	LCD DI	LCD Data Output	O	0
64	LCD CLK	LCD Clock	O	0

## ■ IC604 C2BBGF000021

Pin No.	Name	Description	I/O	Vol. (V)
1	DSP RST	DSP Reset Output	O	5.3
2	CD MUTE	CD Mute	I	0
3	DSP CS	DSP Chip Select Output	O	0
4	AVSS	Connect to Ground (for A/D Converter)	—	0
5	DSP WRDY	DSP Write Ready	I	4.9
6	DSP DRDY	DSP Read Ready	I	0
7	AVREF	Connect to SW5V (for A/D Converter)	I	5.1
8	DSP SO	DSP Data Input	I	4.5
9	DSP SI	DSP Data Output	O	5
10	DSP CLK	DSP Clock	O	5.3
11	CH DATA	CD/MD Changer Data Input	I	0
12	(NC)	—	—	—
13	CH CLK	CD/MD Changer Clock Input	I	0
14	CD RST	CD CPU Reset Output	O	5.3
15	CD ON	CD ON Signal	O	5.3
16	CD SOM	CD CPU Serial Data Input	I	0
17	CD SIM	CD CPU Serial Data Output	O	0
18	CD C1	CD CPU Clock	O	5.3
19	AMP CNT	Ext Power AMP Control / DSP Reset	O	5.3
20	ANT CNT	Motor Antenna Control Output	O	5.3
21	MAIN CNT	Main Power Control Output	O	5.3
22	AMP MUTE	Power Amp Mute Output	O	0
23	CH CHANGE	Twin-Changer Control Output	O	5.3
24	DISP DATA	Display CPU Data Output	O	0
25	DISP CLK	Display CPU Clock	O	5.2
26	DISP CE	Display CPU Chip Enable	O	5.2
27	PLL CE	PLL Chip Enable	O	0.7
28	PLL COM	PLL Data Output	O	0.7
29	PLL CLK	PLL Clock Output	O	0.4
30	PLL DATA	PLL Data Input	I	3.8
31	SUB ON	Display CPU ON Signal	O	5.3
32	CH SENS	Twin-Changer Detect Signal Input	I	5.0
33	VSS	Connect to Ground	—	0
34	SUB ON A	Sub CPU Chip Enable	O	4.9
35	STEREO	Radio Stereo Detect Signal Input	I	4.9
36	SEL1-A	Audio Select IC Control Signal A (IC1)	O	8.0
37	SEL1-B	Audio Select IC Control Signal B (IC1)	O	8.0
38	SEL2-A	Audio Select IC Control Signal A (IC2)	O	8.0
39	SEL2-B	Audio Select IC Control Signal B (IC2)	O	0
40	CH RM	CD/MD Changer Remote Control	O	5.3
41	DIVER CNT	TV Diversity Control	O	0
42	TUNER V CNT	Tuner Pack Power Control	O	5.3
43	(NC)	—	—	—
44	(NC)	—	—	—
45	(NC)	—	—	—
46	(NC)	—	—	—
47	(NC)	—	—	—
48	(NC)	—	—	—
49	(NC)	—	—	—
50	BUZ	Buzzer Output	O	0
51	(NC)	—	—	—
52	(NC)	—	—	—
53	MDM SCLK	MD CPU Clock	O	5.3
54	MDM SIN	MD CPU Data Input	I	0
55	MDM RST	MD CPU Reset Signal	O	0
56	MDM ON	MD Mechanism Eject Signal	O	5.3
57	MDM SOUT	MD CPU Data	O	4.4
58	A-MUTE	Mute Control	O	5.3
59	FAN CNT	Cooling Fan Control	O	5.3
60	RESET	System Reset	I	5.3
61	DATA KEY	KEY Data Input	I	5.5
62	CH STB	CD/MD Changer Strobe Signal	I	0
63	BATT SEN	Battery Voltage Detect	I	5.0
64	ACC	ACC Voltage Detect	I	5.0
65	MUTING	Mute Signal	I	5.2
66	MD/CD CNT	MD/CD Control	O	0
67	(NC)	—	—	—
68	VDD 5V	Connect to VDD5V	—	5.3
69	X2	System Clock (4.19MHz)	O	2.9
70	X1	System Clock (4.19MHz)	I	2.2
71	(NC)	—	—	—
72	(NC)	—	—	—
73	ILLUM	Illumination Signal Input	I	5.0
74	A VDD5V	Connect to VDD5V	—	5.5
75	A VREF	Connect to SW5V	—	5.0
76	(NC)	—	—	—
77	SD	Radio Signal Strength Input	I	0.7
78	(NC)	—	—	—
79	(NC)	—	—	—
80	WRQ	DSP	I	5.1

## ■ IC801 YEAMAK7712BF

Pin No.	Name	Description	I/O	Vol. (V)
1	TST11(NC)	—	—	—
2	OPCL	A/D, D/A Converter L-Connect	I	0
3	PDAD	D/A Reset	I	0
4	PDDA	D/A Reset	I	0
5	PD	Power Down	I	5.0
6	RST	Reset Input	I	5.0
7	TST101(NC)	—	—	—
8	TST102(NC)	—	—	—
9	TST103(NC)	—	—	—
10, 11	DVB	Power Supply (for Digital)	—	5.0
12	SDIN2(NC)	—	—	—
13	SDAD(NC)	—	—	—
14	SDOUT2(NC)	—	—	—
15	SDDA(NC)	—	—	—
16	SDDA2(NC)	—	—	—
17	SDOUT3(NC)	—	—	—
18	SDOUT1	DSP Data	O	2.5
19	SDIN1(NC)	—	—	—
20	SMODE	Interface Clock Select	I	4.9
21	BCLK	DSP B Clock	O	2.5
22	LRCK	DSP LR Clock	O	2.5
23	CLK0	DSP Clock	O	2.5
24	DVDD	Connect to +5V	—	4.9
25	DVSS	Connect to Ground (for Digital)	—	0
26	XTI	X-tal	I	2.2
27	XTO	X-tal	O	2.3
28	TST12	CLK0 (23Pin) Output Control L or Open: Enable H: CLK0=L	I	4.8
29	CS	Chip Select	I	4.8
30	WRQ	Command Register Reset	I	0
31	DVSS	Connect to Ground (for Digital)	—	0
32	DVDD	Connect to +5V (for Digital)	—	4.9
33	SCLK	Serial Data Clock	I	4.9
34	SI	Serial Data Input	I	4.9
35	WRDY	Write Ready CS=H: Hi-Z	O	4.9
36	DRDY	Data Ready Output	O	0
37	SO	Serial Data Output CS=H: Hi-Z	O	4.6
38	CASRF	DRAM Refresh	O	3.6
39	RASCE	DRAM Refresh	O	3.0
40	WE	Write Enable	O	4.6
41A 48	A16A A9(NC)	—	—	—
49	DVSS	Connect to Ground (for Digital)	—	0
50	DVDD	Connect to +5V (for Digital)	—	4.9

Pin No.	Name	Description	I/O	Vol. (V)
51	A8	Address 8	O	2.3
52	A7	Address 7	O	2.5
53	A6	Address 6	O	2.5
54	A5	Address 5	O	2.5
55	A4	Address 4	O	2.5
56	A3	Address 3	O	2.5
57	A2	Address 2	O	2.5
58	A1	Address 1	O	2.5
59	A0	Address 0	O	4.1
60	OE	Output Enable (for Ext SRAM)	O	2.3
61 - 68	IO0 - IO7	Data I/O	I/O	2.3
69	DVSS	Connect to Ground (for Dgial)	—	0
70	DVDD	Connect to +5V (for Digital)	—	4.9
71	DZFSET	Zero Point Detect L: DZF=Enable, H: DZF Output = L	I	0
72	DVSS	Connect to Ground (for Dgial)	—	0
73	DVDD	Connect to +5V (for Digital)	—	4.9
74, 75	DVB	Connect to +5V (for Digital)	—	5.0
76	DZF2(NC)	—	—	—
77	DZF1(NC)	—	—	—
78	(NC)	—	—	—
79	AVB	Connect to +5V (for Analog)	—	5.0
80	AOCTR2	D/A Converter Analog Output2 (R ch)	O	2.4
81	AOUL2	D/A Converter Analog Output2 (L ch)	O	2.4
82	(NC)	—	—	—
83	AOCTR1	D/A Converter Analog Output1 (R ch)	O	2.4
84	AOUL1	D/A Converter Analog Output1 (L ch)	O	2.4
85	VRDAL	Connect to Ground (for D/A Converter)	I	0
86	AVSS	Connect to Ground (Analog Ground)	—	0
87	AVDD	Connect to Ground (Analog Power)	—	5.0
88	VRDAH	Connect to +5V (for D/A Converter)	I	5.0
89	(NC)	—	—	—
90	AINR-	A/D Converter Analog Input (Rch, -)	I	2.4
91	AINR+	A/D Converter Analog Input (Rch, +)	I	2.4
92	AINL-	A/D Converter Analog Input (Lch, -)	I	2.4
93	AINL+	A/D Converter Analog Input (Lch, +)	I	2.4
94	VCOM	Common Voltage	O	2.4
95	VRADL	Connect to +5V (for A/D Converter)	I	0
96	AVSS	Connect to ground (Analog Ground)	—	0
97	AVDD	Connect to Ground (Analog Power)	—	5.0
98	VRADH	Connect to +5V (for A/D Converter)	I	5.0
99	AVB	Connect to +5V (for Analog)	—	5.0
100	(NC)	—	—	—

## TERMINALS DESCRIPTION (Display Block)

### ■ IC901 YEAMLC75884W

Pin No.	Name	Description	I/O	Vol.(V)
1	(NC)	—	—	—
2-51	S4-S53	LCD Segment 4 -53	O	2.7
52	COM1	LCD Common 1	O	2.7
53	COM2	LCD Common 2	O	2.7
54	COM3	LCD Common 3	O	2.7
55	COM4	LCD Common 4	O	2.7
56	KS1	Key Scan Output 1	O	0.9
57	KS2	Key Scan Output 2	O	0.9
58	KS3	Key Scan Output 3	O	0.9
59	KS4	Key Scan Output 4	O	0.9
60	KS5	Key Scan Output 5	O	0.9
61	KS6	Key Scan Output 6	O	0.9
62 - 66	KI1 - KI5	Key Return 1 -5	I	0
67	VDD	Connect to +5V	—	5.1
68	VLCD	LCD Reference Voltage (VDD)	I	5.1
69	VLCD1	LCD Reference Voltage (1)	I	3.3
70	VLCD2	LCD Reference Voltage (2)	I	1.7
71	VSS	Connect to Ground	—	0
72	TEST	TEST Mode	I	0
73	OSC	CR Oscillator	I	3.9
74	/RESET	Reset	I	5.1
75	DO	LCD Data Output	O	4.1
76	CE	LCD Chip Enable	I	0
77	CLK	LCD Clock	I	0
78	DI	LCD Data Input	I	0
79	KEY LED CNT	"POWER" LED Control	O	2.7
80	P.LED CNT	"KEY" LED Control	O	2.7

### ■ IC902 C0HBA0000029

Pin No.	Name	Description	I/O	Vol.(V)
1 - 58	S3 - S60	LCD Segment	O	2.7
59 - 66	COM8 - COM1	Key Signal Input	I	0
67	VDD	+5V Power Voltage	—	5.1
68	VLCD	LCD Drive Voltage (VDD)	I	5.1
69	VLCD1	LCD Drive Voltage (1)	I	3.8
70	VLCD2	LCD Drive Voltage (2)	I	2.5
71	VLCD3	LCD Drive Voltage (3)	I	1.3
72	VSS	Connected to Ground	—	0
73	OSCO	CR Oscillator	O	3.9
74	OSCI	CR Oscillator	I	2.7
75	/RESET	Reset Input	I	5.1
76	CE	LCD Chip Enable	I	0
77	CLK	LCD Clock	I	0
78	DI	LCD Data	I	0
79	S1	LCD Segment	O	2.7
80	S2	LCD Segment	O	2.7

# TERMINALS DESCRIPTION (CD Servo Block)

## ■ IC201 YEAMCXD2587Q

Pin No.	Port	Description	I/O	Vol. (V)
1	SQSO	Sub-Q 80bit,PCM Peak and Level Data Output	O	0
2	SQCK	Clock Input for SQSO Read Output	I	5
3	XRST	System Reset (L:Reset)	I	0
4	YSYM	Mute Input (H:Mute)	I	3.4
5	DATA	Serial Data Input form CPU	I	5
6	XLAT	Serial Latch Input form CPU	I	4.1
7	CLOCK	Serial Clock Input form CPU	I	0.5
8	SENS	Sens Output to CPU	O	5
9	SCLK	Serial Clock Input for SENS Data Read	I	0
10	VDD	+5V Power Supply for Digital	-	5
11	ATSK	For Anti-Shock	I/O	0
12	SPOA	Microcomputer Extension Interface (Input A)	I	5
13	SPOB	Microcomputer Extension Interface (Input B)	I	5
14	XLON	Microcomputer Extension Interface (Output)	O	4.8
15	WFCK(NC)	-	-	-
16	MNT1(NC)	-	-	-
17	MNT0(NC)	-	-	-
18	MNT3(NC)	-	-	-
19	C2PO(NC)	-	-	-
20	SCOR(NC)	-	-	-
21	COU(NC)	-	-	-
22	MIRR	Mirror Signal	I/O	0
23	DFCT	Defect Signal	I/O	0
24	FOK	Focus OK Signal	I/O	4.8
25	LOCK	GFS Signal Output Sampling by 460Hz (H:GFS to High,L:GFS to Low of 8 times)	I/O	4.8
26	MDP	Servo Control Output for Spindle Motor	O	2.5
27	SSTP	Disc Most Inner Track Detection Signal Input	-	0
28	SFDR	Sled Drive Output	O	0
29	SRDR	Sled Drive Output	O	0
30	TFDR	Tracking Drive Output	O	0
31	TRDR	Tracking Drive Output	O	0
32	FFDR	Focus Drive Output	O	0
33	FRDR	Focus Drive Output	O	0
34	VSS	Digital GND	-	0
35	TEST	(Connecting to GND)	-	0
36	TES1	(Connecting to GND)	-	0
37	XTSL	Crystal Selector Input	-	0
38	VC	Center Voltage Input	I	2.4
39	FE	Focus Error Signal Input	I	2.6
40	SE	Sled Error Signal Input	I	2.1
41	TE	Tracking Error Input	I	2.1
42	CE	Center Servo Analog Input	I	2.4
43	RFDC	RF Signal Input	I	3.1
44	ADKO(NC)	-	-	-
45	AVss0	Analog GND	-	0
46	IGEN	Constant Current Input for OP Amplifier	I	1.4
47	AVdd0	+5V Power Supply for Analog	-	5.0
48	ASVO	EFM Full-Swing Output (L:VSS,H:VDD)	O	2.7
49	ASY1	Asymmetry Compare Voltage Input	I	2.4
50	BIAS	Asymmetry Circuit Constant Current Input	I	0.9
51	RFAC	EMF Signal Input	I	0
52	AVss3	Analog GND	-	0
53	CLTV	VCO Control Voltage Input for Master	I	2.0
54	FILO	Filter Output for Master PLL (Slave:Digital PLL)	O	2.5
55	FILI	Filter Input for Master PLL	I	2.4
56	PCO	Charge Pump Output for Master PLL	O	2.5
57	AVdd3	+5V Power Supply for Analog	-	5.0
58	VSS	Digital GND	-	0
59	VDD	+5V Power Supply for Digital	-	5.0
60	DOU(NC)	-	-	-
61	LRCK(NC)	-	-	-
62	PCMD(NC)	-	-	-
63	BCK(NC)	-	-	-
64	EMPH(NC)	-	-	-
65	XVDD	+5V Power Supply for Master Clock	-	5.0
66	XTAI	Crystal Oscillator Input of Master Clock	I	2.3
67	XTAO	Crystal Oscillator Output	O	2.6
68	XVSS	Analog GND for Master Clock	-	0
69	AVdd1	+5V Power Supply for Analog	-	5.0
70	AOUT1	Lch, Analog Output	O	2.0
71	AIN1	Lch, Analog Input	I	2.0
72	LOUT1	Lch, LINE Output	O	2.0
73	AVSS1	Analog GND	-	0
74	AVSS2	Analog GND	-	0
75	LOUT2	Rch, LINE Output	O	2.0
76	AIN2	Rch, OP Amplifier Input	I	2.0
77	AOUT2	Rch, Analog Output	O	2.0
78	AVdd2	+5V Power Supply for Analog	-	5.0
79	RMUT(NC)	-	-	-
80	LMUT(NC)	-	-	-

## ■ IC451 YEAMM471377M

Pin No.	Port	Description	I/O	Vol. (V)
1	NC	-	-	-
2	SQSO	Q Code Serial Data Read	I	0.3
3	YSYM	LSI Mute ON Signal (H:Mute ON,L:Mute OFF)	O	0
4	CLOCK	Serial Clock Output to Servo Signal Process LSI	O	4.3
5	XLAT	Serial Latch Pulse Output to Servo Signal Process LSI	O	5.0
6	DATA	Serial Data Output to Servo Signal Process LSI	O	3.5
7	PCO	Spindle Motor ON/OFF (H:OFF,L:ON) Photo Sensor ON/OFF (H:OFF,L:ON)	I/O	5.0
8	R	Right Insert Detection (L:Detect)	I	0
9	L	Left Insert Detection (L:Detect)	I	0
10	OUT R	Disc OUT Detection (H:Detect)	I	0
11	INNER SW	Inner Track Detection (L:Detect)	I	4.8
12	OUT L	Disc OUT Detection (H:Detect)	I	0
13	IN	Disc IN Detection (H:Detect)	I	0
14	CLUMP	Disc Clump Detection (H:Detect)	I	0
15	Vref	Reference Voltage	-	2.4
16	NC	-	-	-
17	NC	-	-	-
18	XIN	Crystal Oscillator Input	I	2.4
19	XOUT	Crystal Oscillator Output	O	2.5
20	NC	-	-	-
21	Avss	Analog GND	-	0
22	Vss	GND	-	0
23	Vcc	+5V Power Supply	-	5.0
24	NC	-	-	-
25	P50/XCIN(NC)	-	-	-
26	DFCT	Defect Detection Signal (H:Detect)	I	0
27	NC	-	-	-
28	/RST	CPU Reset	I	5.0
29	NC	-	-	-
30	CDON	Control Signal for Deck Control Micro Computer (H:ON,L:Sleep)	I	5.0
31	ATSK	Anti-Shock Detection Signal (H:Detect)	I	0
32	FOK	RF Level Detection Signal (H:Focus ON,L:Focus OUT)	I	4.8
33	SENS	Internal Status Input from Servo Signal Process LSI	I	5.0
34	NC	-	-	-
35	PC2	Loading Motor Driver ON/OFF (L:ON)	I/O	5.0
36	LOCK	GFS Signal Input Sampling by 460Hz (H:GFS to High,L:GFS to Low of 8 times)	I	4.8
37	MODE	Mode Selector Signal at Accessing (H:Selector ON,L:selector OFF)	O	0
38	LOD	Loding Motor Control (H:Eject,L:Load)	I/O	2.4
39	PC1	Actuator Motor Driver ON/OFF (H:Motor ON,L:Motor OFF)	I/O	0
40	CLKOFF	LSI Clock Oscillation Stop Signal (H:OSC, L:Stop)	O	5.0
41	PLLOFF	VCO Oscillation 5 stop Signal (H:Stop, L:OSC)	O	0
42	SCLK	Cock Output for SENS Serial Data Read	O	5.0
43	SIM	Serial Data Input from Micro Computer	I	0
44	NC	-	-	-
45	NC	-	-	-
46	SOM	Serial Data Output to Micro Computer	O	0
47	SCKM	Serial Clock Output to Micro Computer	O	5.0
48	MUTE	Analog Mute ON Signal (H:Mute ON,L:Mute OFF)	O	0
49	MIRR	Mirror Detection Signal (H:MIRR Del,L:ON MIRR)	I	0
50	NC	-	-	-
51	Vss	GND	-	0
52	SE	SE Signal Input	I	2.1
53	XRST	Reset Output to Servo Signal Process LSI	O	5.0
54	SQCK	Clock Output to Servo Signal Process LSI	O	5.0
55	P15/TXD(NC)	-	-	-
56	NC	-	-	-

# TERMINALS DESCRIPTION (MD Servo Block -1)

## IC401 MN66614R4C1

Pin No.	Port	Description	I/O	Vol. (V)
1	PEFMS	FEM Data Slice Input	I	1.8
2	AVSS2	Analog GND	I	0
3	AVDD2	+3.3V Power Supply for Analog	I	3.4
4	FE	Focus Error Signal	I	1.8
5	TE	Tracking Error Signal	I	1.8
6	GFC	Focus Acceleration Sensor Input	I	1.8
7	GTK	Tracking Acceleration Sensor Input	I	1.8
8	VRT	Positive Reference Voltage for A/D Converter	I	2.8
9	VRB	Negative Reference Voltage for A/D Converter	I	0.7
10	3TMON	FEM 3T Signal Envelope Input	I	1.7
11	AS	Beam Sum Signal	I	2.4
12	TVD	Traverse Drive/Stepping Motor Drive Signal	O	1.8
13	SPD	Spindle Drive Signal	O	1.9
14	STP (NC)	—	—	—
15	TRD	Tracking Drive Signal	O	1.8
16	AVSS1	Analog GND	I	0
17	AVDD1	+3.3V Power Supply for Analog	I	3.4
18	VREF1	Reference Voltage Input	I	1.8
19	TOFS	TE Offset Adjust Output	O	1.8
20	ASOFS	AS Offset Adjust Output	O	1.8
21	FOFS	FE Offset Adjust Output	O	1.8
22	FBAL	FE Balance Adjust Output	O	1.8
23	TGAIN	TE Gain Adjust Output	O	1.7
24	TBAL	TE Balance Adjust Output	O	1.8
25	ASGAIN	AS Gain Adjust Output	O	1.8
26	FOD	Focus Drive Signal	O	1.8
27	AVSS0	Analog GND	I	0
28	FEMPLLF	Filter Input for EFM PLL	I	1.8
29	EFMIREF	Current Control Input for EFM PLL	I	1.3
30	AVDD0	+3.3V Power Supply for System Clock PLL	I	3.4
31	SISPLLF	Filter Input for	I	1.8
32	TS0	(Connecting to GND)	I	0
33	MDAIREF	Current Control Input for System Clock PLL	I	1.3
34	TS1	(Connecting to GND)	I	0
35	TRNPLLF	Filter Input for Internal Clock PLL	I	3.4
36	TS2	(Connecting to GND)	I	0
37	DIPCO	PLL PD Output to Digital Audio Interface	O	3.4
38	DIBUFI	Integrate Amplifier Input from Digital Audio Interface	I	2.5
39	DIBUFO	Integrate Amplifier Output to Digital Audio Interface	O	0
40	DIVCOI	VCO Control Voltage Input from Digital Audio Interface	I	0
41	TS3	(Connecting to GND)	I	0
42	TS4	(Connecting to GND)	I	0
43	NRFDET	EMF Detection Signal (L:Detect)	I	0.2
44	BDO	AS Drop Out Signal (H:Drop Out)	I	0.2
45	DVDD0	+3.3V Power Supply for Digital	I	3.4
46	DVSS0	Digital GND	I	0
47	FOTRON (NC)	—	—	—
48	TVON (NC)	—	—	—
49	SPON	Spindle Drive ON Signal	O	3.4
50	DR (NC)	—	—	—
51	FG	FG Input	I	1.5
52	REFM (NC)	—	—	—
53	NREFM (NC)	—	—	—
54	HFRP (NC)	—	—	—
55	APCD	Laser Power Setting PWM Output	O	1.9
56	NREC (NC)	—	—	—
57	NRST	Hardware Reset (L:Reset)	I	3.3
58	SELAD	Command Address Select Signal	I	0.6
59	SSCK	Command Serial Clock Signal	I	3.3
60	SSDW	Command Serial Write Data	I	0.6
61	SSDR	Command Serial Read Data	O	2.2
62	MDISY	CD ROM Sector sync Signal	O	0.2
63	SCTCY	SUBQ/ADIP Sync Signal	O	0.2
64	CFSYNC	ATRAAC Frame Sync Signal	O	0.2

Pin No.	Port	Description	I/O	Vol. (V)
65	VREF5	Reference Voltage for Signal Level	I	3.4
66	DVDD1	+3.3V Power Supply for Digital	I	3.4
67	DVSS1	Digital GND	I	0
68	RAD10	DRAM Address 10 (MSB)	O	1.6
69	RAD9	DRAM Address 9	O	1.6
70	RAD8	DRAM Address 8	O	1.6
71	RAD7	DRAM Address 7	O	1.6
72	RAD6	DRAM Address 6	O	1.6
73	RAD5	DRAM Address 5	O	1.8
74	RAD4	DRAM Address 4	O	1.6
75	DVDD2	+3.3V Power Supply	I	3.4
76	DVSS2	Digital GND	I	0
77	RAD3	DRAM Address 3	O	1.5
78	RAD2	DRAM Address 2	O	1.8
79	RAD1	DRAM Address 1	O	1.8
80	RAD0	DRAM Address 0 (LSB)	O	2.7
81	RDT3	DRAM Data 3 (MSB)	I/O	1.6
82	RDT2	DRAM Data 2	I/O	1.6
83	RDT1	DRAM Data 1	I/O	1.8
84	RDT0	DRAM Data 0 (LSB)	I/O	2.5
85	NRAS	DRAM Lower Address Strobe	O	2.5
86	NCAS	DRAM Column Address Strobe	O	2.3
87	NWE	DRAM Write Enable	O	1.8
88	FS384	384Fs Output	O	1.7
89	SCL	Bit Clock Output (64Fs)	O	1.8
90	SW6	Rear Compression Word Clock Output (Fs)	O	1.2
91	SDAP	Audio Data Output to D/A Converter	O	1.8
92	SWSA (NC)	—	—	—
93	SDAR	Audio Data Input from A/D Converter	I	0
94	TX (NC)	—	—	—
95	DVDD3	+3.3V Power Supply for Digital	I	3.4
96	RX1	Digital Audio Interface Signal Output 1 (C-MOS)	I	0
97	RX2	Digital Audio Interface Signal Output 2 (C-MOS)	I	0
98	DVSS3	Digital GND	I	0
99	DIULK (NC)	—	—	—
100	RCL (NC)	—	—	—
101	RSWSA (NC)	—	—	—
102	RXDA (NC)	—	—	—
103	R384 (NC)	—	—	—
104	CVDA	Clock Input for CD-TEXT Data Communication	I	0
105	CV384	(Connecting to GND)	I	0
106	DADD4 (NC)	+3.3V Power Supply for Digital	I	3.4
107	XI	Crystal Oscillator Input (16.934MHz)	I	1.6
108	XO	Crystal Oscillator Output (16.934MHz)	O	1.8
109	DVSS4	Digital GND	I	0
110	MONI0	Monitor Output 0/CD-TEX Communication Data Output	O	1.8
111	MONI1	Monitor Output 1	O	0
112	MONI2	Sub-Code Frame Sync Signal Output for CD-TEXT	O	3.4
113	MONI3	Monitor Output 3/Sub-Code Block Sync Signal Output for CD-TEXT	O	3.4
114	MONI4	(Open)	O	0
115	MONI5	(Open)	O	0
116	TRNFI	Filter Input for Internal Clock PLL	I	0
117	SYSFI	Filter Input for System Clock PLL	I	0
118	TCSEL	(Connecting to GND)	I	0
119	RFSWPG	RFIC Bit/Group Setting (H:Bit)	O	0
120	TRCRS	Track Close Signal	I	3.3
121	OFTR	Off Track Signal (H:Off Track)	I	2.5
122	DVDD5	+3.3V Power Supply for Digital	I	3.4
123	ADIP	ADIP FM Signal Input (21.6±0.98kHz, 100mVp-p or more)	I	1.5
124	DVSS5	Digital GND	I	0
125	VREFD	Reference Voltage PWM Output/Drive IC Track	O	—
126	EFMSEL	(Connecting to GND)	I	0
127	PEFM1	Loop Filter Output 1 for Data Slice	O	1.8
128	PEFM2	Loop Filter Output 2 for Data Slice	O	1.8

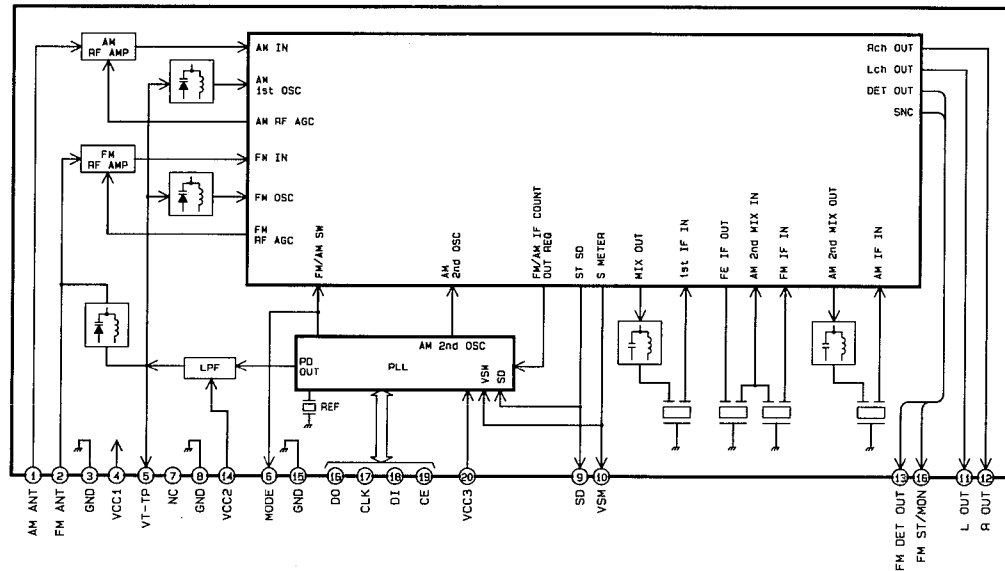
## TERMINALS DESCRIPTION (MD Servo Block -2)

## ■ IC501 MN101C01DAF

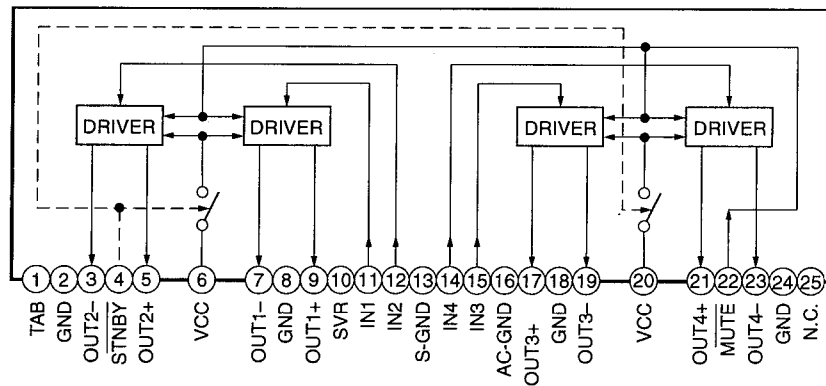
Pin No.	Port	Name	Description	I/O	Vol. (V)
1	VREF	(NC)	—	—	—
2	AN0	(NC)	—	—	—
3	AN1	(NC)	—	—	—
4	AN2	(NC)	—	—	—
5	AN3	(NC)	—	—	—
6	AN4	(NC)	—	—	—
7	AN5	(NC)	—	—	—
8	AN6	(NC)	—	—	—
9	AN7	(NC)	—	—	—
10	VREF+	VREF+	Reference Voltage for A/D Converter	—	3.4
11	VDD	VDD	+3.3V Power Supply	—	3.4
12	OSC2	OSC2	Crystal Oscillator Output (7.37MHz)	O	1.7
13	OSC1	OSC1	Crystal Oscillator Input (7.37MHz)	I	1.7
14	VSS	VSS	GND	—	0
15	X	(NC)	—	—	—
16	XO	(NC)	—	—	—
17	MMQD0	(NC)	—	—	—
18	P00	(NC)	—	—	—
19	P01	(NC)	—	—	—
20	P02	(NC)	—	—	—
21	P03	SSDW	Serial Write Data to IC401	O	0.6
22	SB11	SSDR	Serial Read Data from IC402	I	2.0
23	SBT1	SSCK	Serial Clock to IC401	O	3.3
24	P06	(NC)	—	—	—
25	NRST	RESET	CPU Reset	I	3.0
26	P10	SELAD	Serial Address Select from IC401	I	0.7
27	P11	(NC)	—	—	—
28	P12	(NC)	—	—	—
29	P13	CAS	DRAM CAS Signal	I	3.0
30	P14	(NC)	—	—	—
31	IRQ0	MDON	System Start/Stop Control (H:Start)	I	2.6
32	IRQ1	MDSY	Sector Sync from IC401	I	0.7
33	IRQ2	SCTCY	SUBQ/ADIP Sync	I	0.2
34	IRQ3	CFCSCNC	ATRAAC Frame Sync	I	0.2
35	IRQ4	(NC)	—	—	—
36	P30	SOM	Serial Data Output for Bus Communication	O	1.3
37	SB12	SIM	Serial Data Input for Bus Communication	I	1.0
38	SBT2	SCKM	Serial Clock Input for Bus Communication	I	3.3
39	P33	(NC)	—	—	—
40	P34	(NC)	—	—	—
41	P35	(NC)	—	—	—
42	P36	(NC)	—	—	—
43	P37	(NC)	—	—	—
44	P40	IN SW	Disc IN SW Input	I	0
45	P41	INNER SW	Inner SW Input	I	3.2
46	P42	MEDIA SW	Media SW Input	I	3.2
47	P43	CLUMP SW	Clump Completion SW Input	I	0
48	P44	(NC)	—	—	—
49	P45	(NC)	—	—	—
50	P46	(NC)	—	—	—
51	P47	(NC)	—	—	—
52	NWE	(NC)	—	—	—
53	NRE	(NC)	—	—	—
54	NCS	(NC)	—	—	—
55	A16	(NC)	—	—	—
56	A17	(NC)	—	—	—
57	A0	(NC)	—	—	—
58	A1	(NC)	—	—	—
59	A2	(NC)	—	—	—
60	A3	(NC)	—	—	—
61	A4	(NC)	—	—	—
62	A5	(NC)	—	—	—
63	A6	(NC)	—	—	—
64	A7	(NC)	—	—	—
65	A8	TVD	Traverse Motor Control	I/O	0.5
66	A9	RFSWHL	Reflection Rate Selector for TC101	I/O	0
67	A10	RFSTBY	Standby for IC101	I/O	3.3
68	A11	LDON	Laser ON Signal	I/O	3.4
69	A12	DEMPH	MASH Emphasis	I/O	0
70	A13	RASON	DRAM RAS Control (H:ON)	I/O	3.4
71	A14	CASON	DRAM CAS Control (H:ON)	I/O	3.3
72	A15	CLKON	Clock Control for IC401 (L:Stop)	I/O	2.9
73	D7	LODBAK	Loading Motor Brake (H:Brake)	I/O	0
74	D6	LODMUTE	Loading Motor Driver Mute (H:Mute)	I/O	2.6
75	D5	TRVMUTE	Traverse Motor Mute (H:Mute)	I/O	0
76	D4	LOD+	Loading Motor Control + (H:Lode,L:Eject)	I/O	1.6
77	D3	LOD-	Loading Motor Control - (H:Lode,L:Eject)	I/O	1.6
78	D2	BCNT	Reference Voltage Control (H:PSV ON)	I/O	3.3
79	D1	ACTMUTE	Actuate Mute (H:Mute)	I/O	0
80	D0	PRST	Reset Input from IC401	I/O	3.3

# PACKAGE AND IC BLOCK DIAGRAM (1)

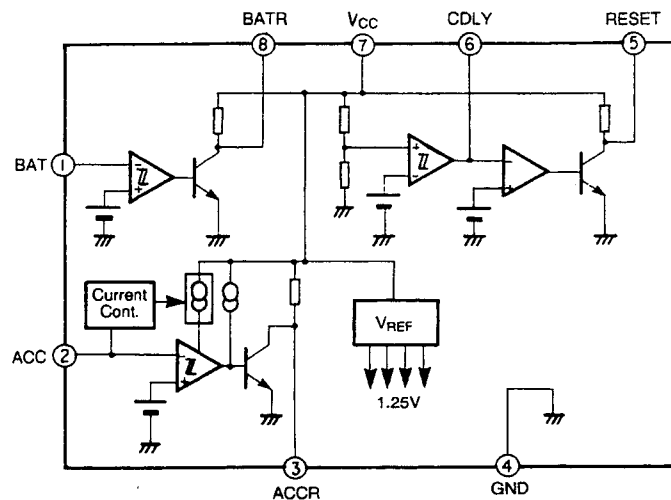
■ PA51 C5EA00000069 [E-6726A]



■ IC306 YEAMTDA7384 [E-6726A]

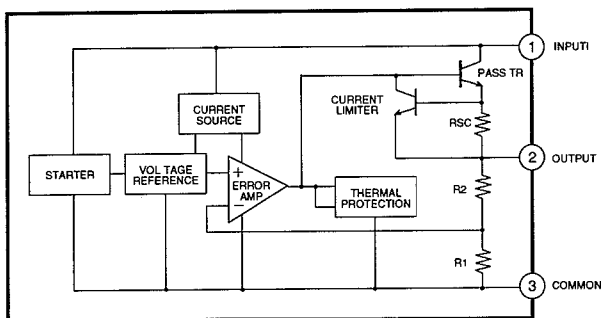


■ IC602 AN8065SE1 [E-6726A]

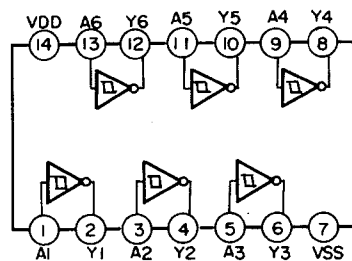


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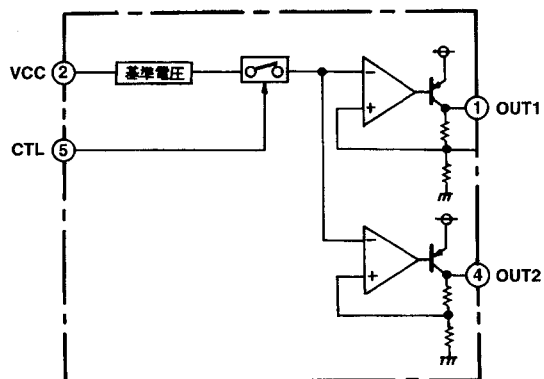
■ IC704 AN7805F [E-6726A]



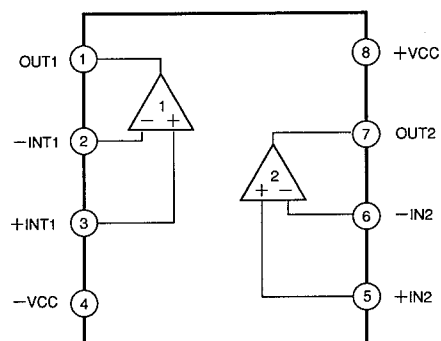
■ IC705 MN4584CST1 [E-6726A]



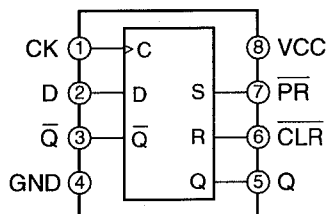
■ IC706, 707 YEAMA61W12ST [E-6726A]



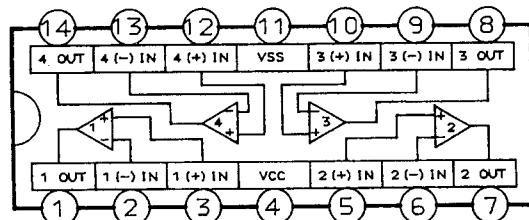
■ IC203, 308 YEAMPC4570T1 [E-8587B]



■ IC204 YEAMTC7W74UL [E-8587B]



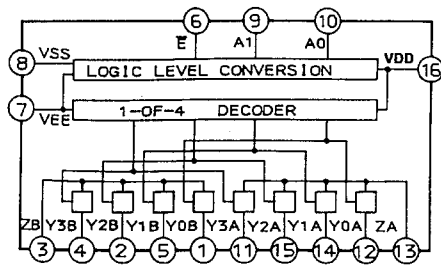
■ IC205, 302 YEAMPC4574T2 [E-8587B]



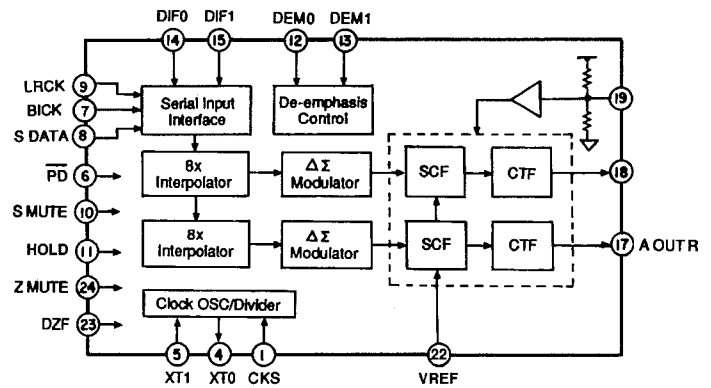


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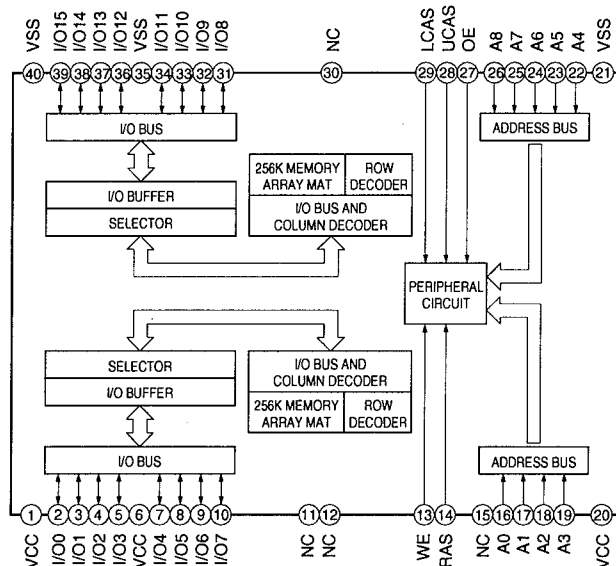
■ IC301, 303 YEAMBU4052VT [E-8587B]



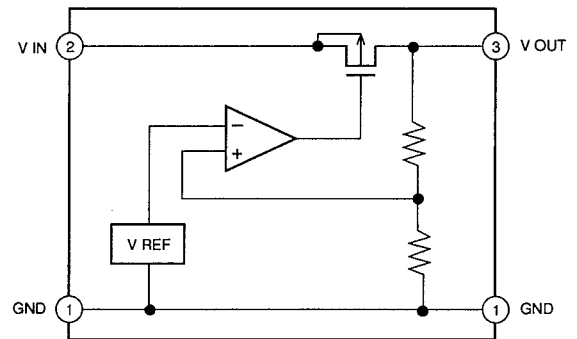
■ IC307 YEAMAK4320 [E-8587B]



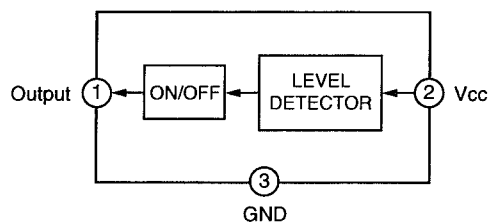
■ IC802 YEAMN4260J60 [E-8587B]



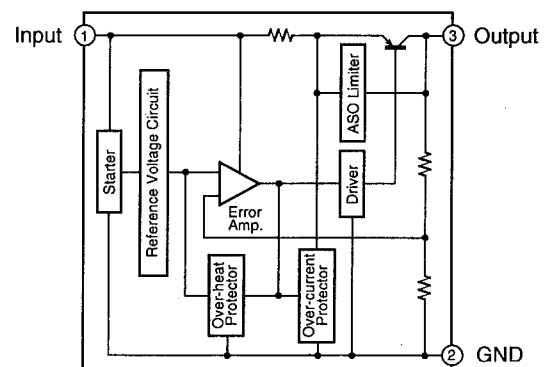
■ IC702 YEAM7200U33T [E-8587B]



■ IC903 MN1382QTX [E-8589A]

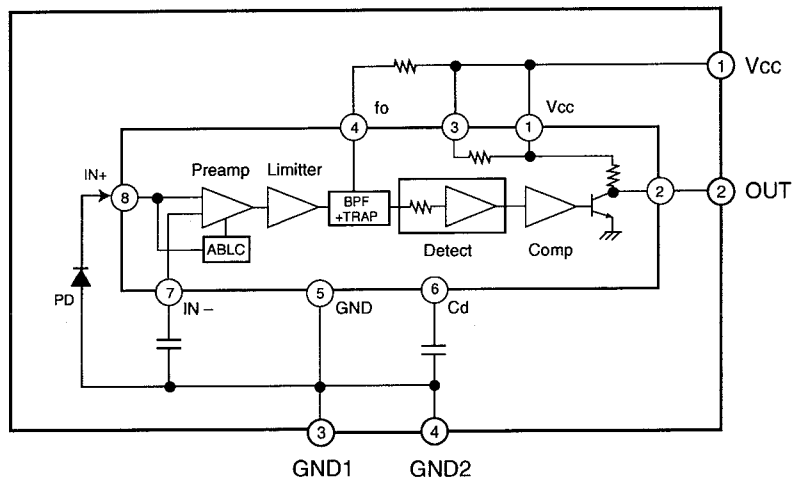


■ IC807, 808 YEAM178M05FP [E-8587B]

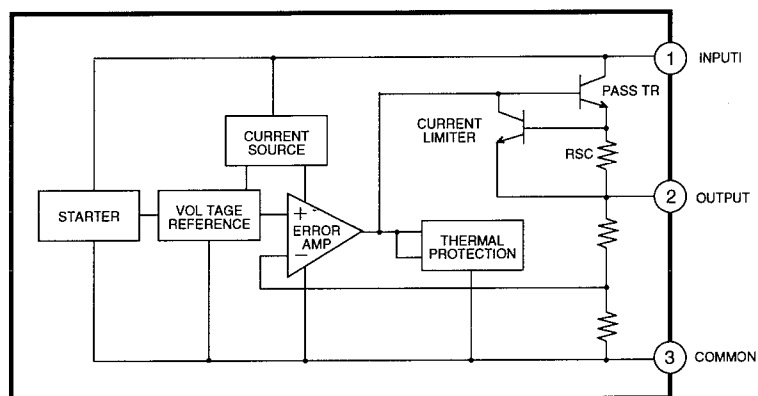


## PACKAGE AND IC BLOCK DIAGRAM (4)

## ■ IC905 YEAMPASB06B2 [E-8589A]

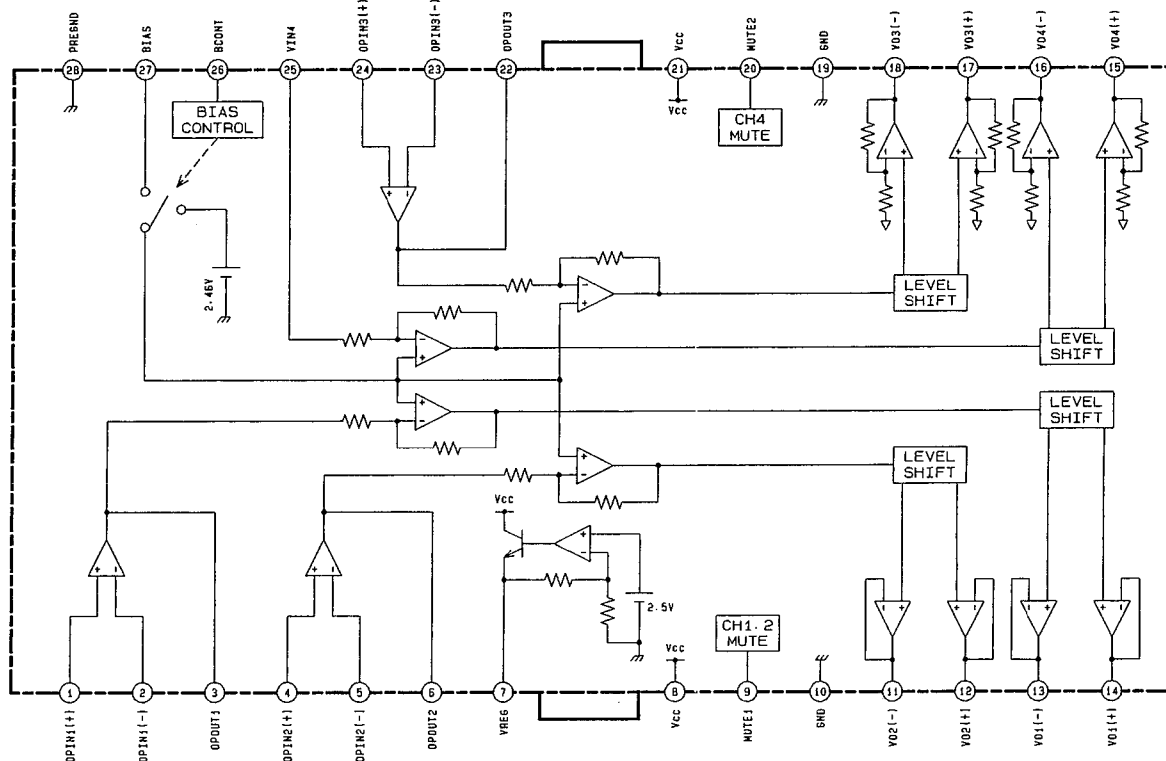


## ■ IC401 AN78N09 [E-8588B]

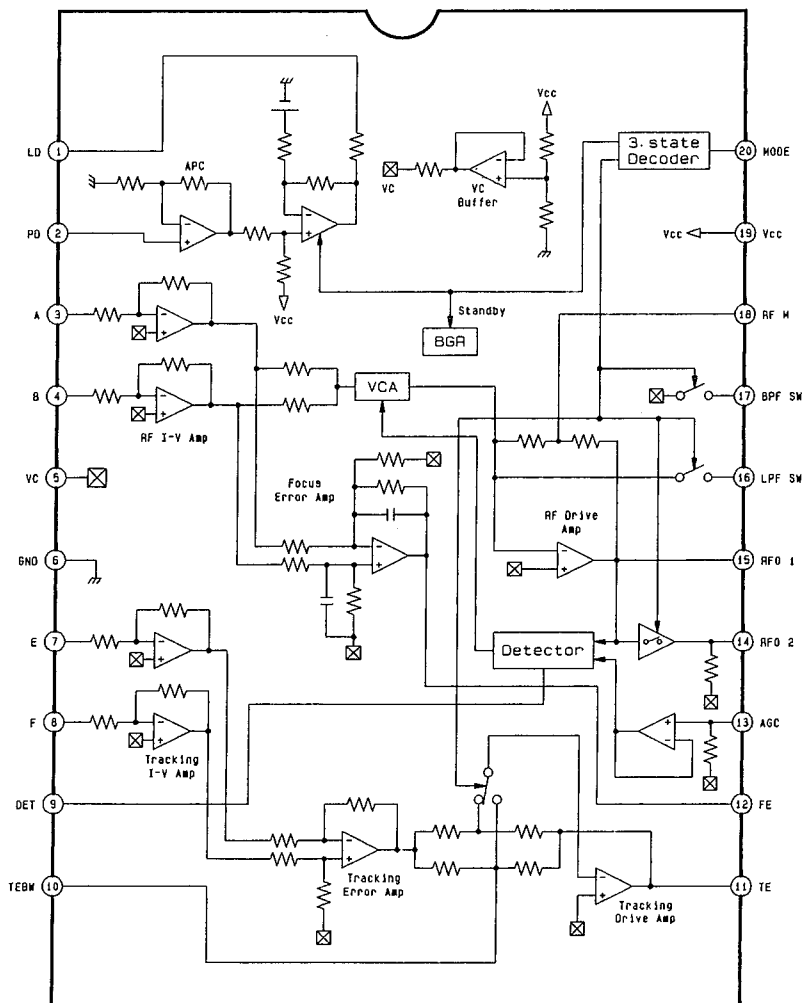


# PACKAGE AND IC BLOCK DIAGRAM (CD Servo Block)

## ■ IC951 YEAMBA5971FP [E-8400]

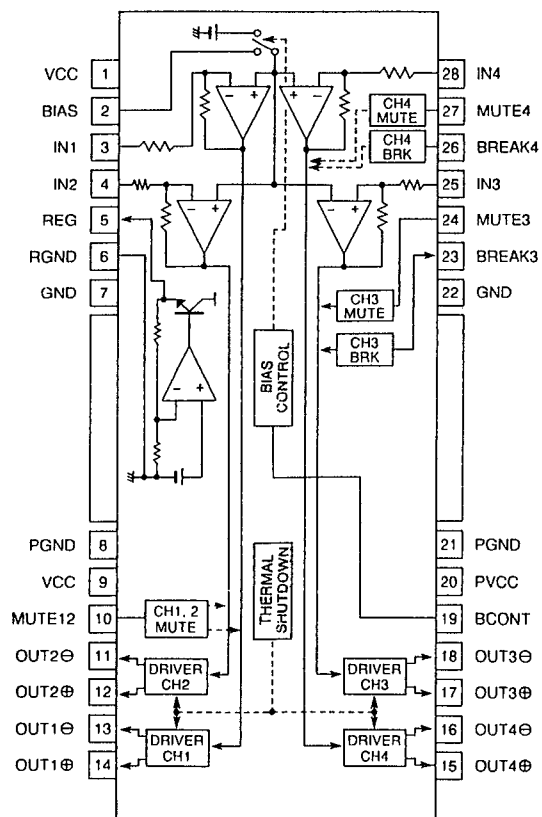


## ■ IC101 YEAMCXA2535N [E-8400]

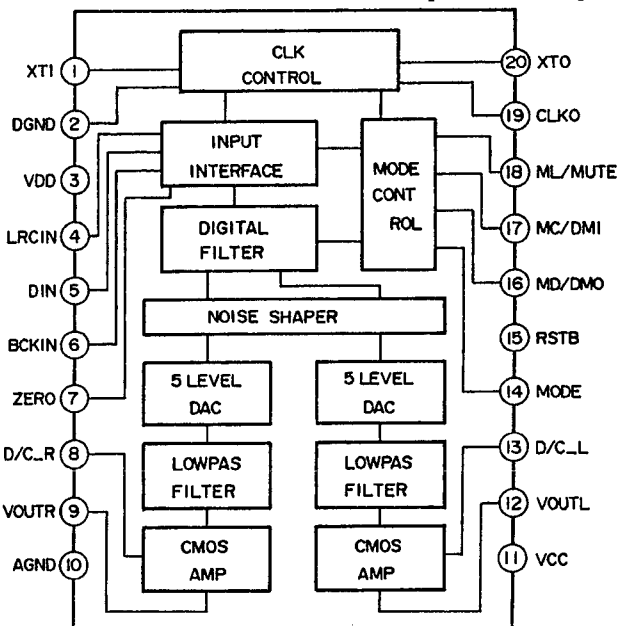


## PACKAGE AND IC BLOCK DIAGRAM (MD Servo Block)

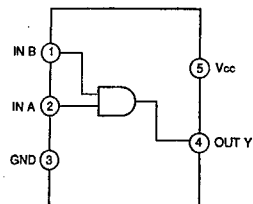
■ IC701 YEAMBA6891FP [D96222A/3]



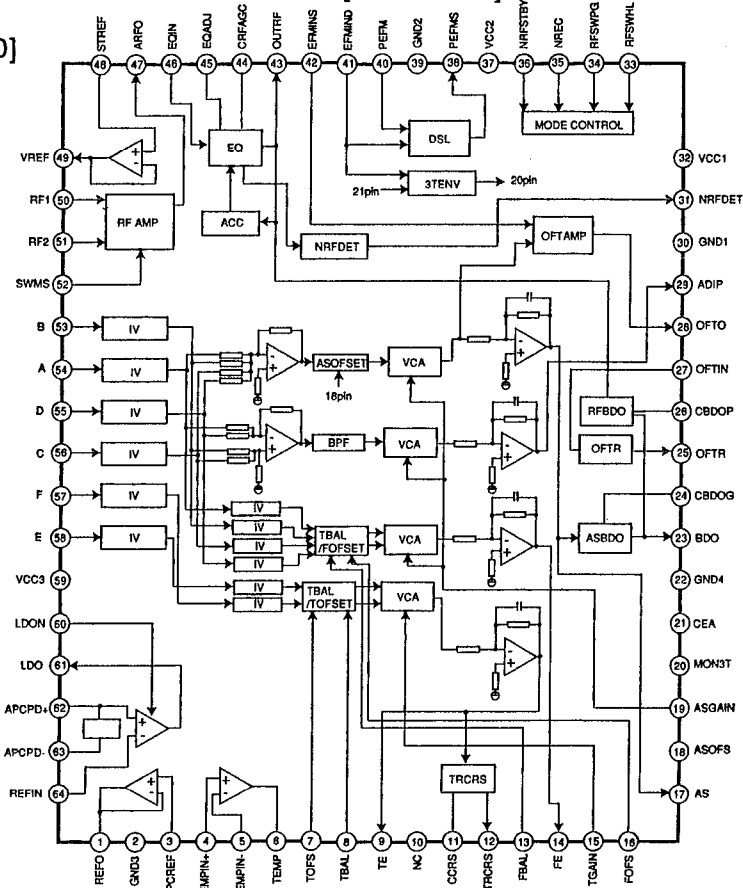
■ IC201 YEAMBBDA1717 [D96222A/3]



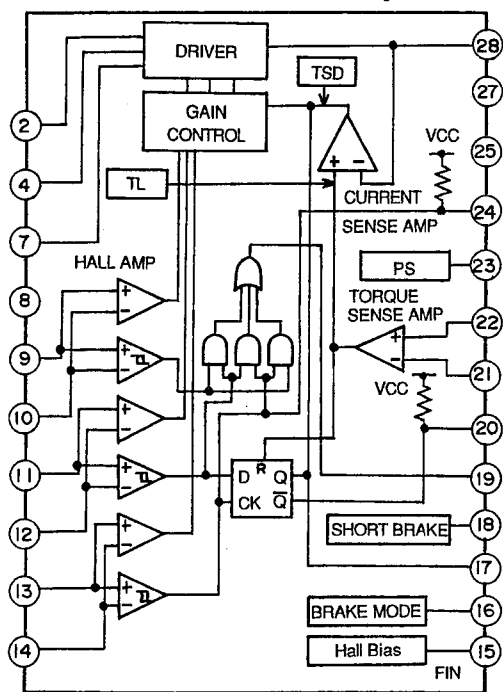
■ IC461,462 YEAMTC7SL08F [D96222A/3]



■ IC101 AN8771NFH [D96222A/3]



■ IC801 YEAMBA6858FP [M1-001-1-00]



# 1 Replacement Parts List

## Note:

1. Be sure to make your orders of replacement parts according to this list.
2. Important safety notice: Components, identified by  $\Delta$  mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. Location keys in the remarks column indicates the general location of the parts shown in the exploded drawing, as in a load map.
4. The marking (RTL) indicates that Retention Time is limited for this item. After the discontinuation of assembly in production, the item will continue to be availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

## 1.1. IC's and Transistors

### MAIN/AMP BLOCK [E-6726A]

Ref. No.	Part No.	Part Name & Description	Remarks
IC306	YEAMTDA7384	IC	
IC501	C2BBGE000182	IC	
IC602	AN8065SE1	IC	
IC604	C2BBGF000021	IC	
IC704	AN7805F	IC	
IC705	MN4584CST1	IC	
IC706	YEAMA61W12ST	IC	
IC707	YEAMA61W12ST	IC	
PA51	C5EA00000070	IC	
Q501	YEANFP1F3PT1	Transistor	
Q502	YEANCI144WKT	Transistor	
Q503	YEANCI144WKT	Transistor	
Q601	YEANCI4480AN	Transistor	
Q603	YEANCI144EKT	Transistor	
Q604	YEANA124EKT	Transistor	
Q605	YEANCI144EKT	Transistor	
Q621	YEANCI144WKT	Transistor	
Q651	YEANCI144EKT	Transistor	
Q652	YEANCI144EKT	Transistor	
Q661	YEANFA1A4PT2	Transistor	
Q702	YEANA1647ZKT	Transistor	
Q703	YEANFB1F3PT1	Transistor	
Q704	YEANBQ1F3PT1	Transistor	
Q705	YEANCI144WKT	Transistor	
Q706	YEANBQ1F3PT1	Transistor	
Q707	YEANCI144WKT	Transistor	
Q711	YEANB1261ZT	Transistor	
Q712	YEANCI144EKT	Transistor	
Q713	YEANCI144EKT	Transistor	
Q714	YEANCI144EKT	Transistor	
Q718	2SD1273	Transistor	
Q719	2SD1273	Transistor	
Q720	YEANCI4480AN	Transistor	
Q721	YEANBQ1F3PT1	Transistor	

### DSP BLOCK [E-8587B]

Ref. No.	Part No.	Part Name & Description	Remarks
IC203	YEAMPC4570T1	IC	
IC204	YEAMTC7W74UL	IC	
IC205	YEAMPC4574T2	IC	
IC301	YEAMBU4052VT	IC	
IC302	YEAMPC4574T2	IC	
IC303	YEAMBU4052VT	IC	
IC307	YEAMAK4320	IC	
IC308	YEAMPC4570T1	IC	

Ref. No.	Part No.	Part Name & Description	Remarks
IC702	YEAM7200U33T	IC	
IC801	YEAMAK7712BF	IC	
IC802	YEAMN4260J60	IC	
IC807	YEAM178M05FP	IC	
IC808	YEAM178M05FP	IC	
Q201	YEANFMG12T	Transistor	
Q203	YEANFMG12T	Transistor	
Q303	YEANFMG12T	Transistor	
Q602	YEANA114TUTX	Transistor	
Q750	YEANFP1F3PT1	Transistor	
Q751	YEANCI114EKX	Transistor	

### DISPLAY BLOCK [E-8589A]

Ref. No.	Part No.	Part Name & Description	Remarks
IC901	YEAMLC75884W	IC	
IC902	C0HBA0000029	IC	
IC903	MN1382QTX	IC	
IC905	YEAMPASB06B2	IC	
Q901	YEANFB1L3NT2	Transistor	
Q902	YEANCI144WKT	Transistor	
Q931	YEANSSA06T	Transistor	
Q932	YEANSSA06T	Transistor	

### INTERFACE BLOCK [E-8588B]

Ref. No.	Part No.	Part Name & Description	Remarks
IC401	AN78N09	IC	
Q401	YEANCI144WKT	Transistor	
Q402	YEANCI144WKT	Transistor	

## 1.2. Diodes

### MAIN/AMP BLOCK [E-6726A]

Ref. No.	Part No.	Part Name & Description	Remarks
D601	YEADAN202KTX	Diode	
D602	MA741WATX	Diode	
D603	YEADRD56M3T1	Diode	
D606	YEADSS14VZ	Diode	
D703	MA736TX	Diode	
D710	YEADRD56M2T1	Diode	
D711	MA153TX	Diode	
D712	YEADRD39M2T2	Diode	
D720	YEADRD91M1T2	Diode	
D731	YEADRD91M1T2	Diode	
D732	MA741WATX	Diode	

### DISPLAY BLOCK [E-8589A]

Ref. No.	Part No.	Part Name & Description	Remarks
D910	MA8056LMHTX	Diode	
D911	MA8056LMHTX	Diode	
D912	MA8056LMHTX	Diode	
D913	MA8056LMHTX	Diode	
D916	MA8056LMHTX	Diode	
D920	LN1271RAL	LED	
D921	LNJ306G5TUWQ	LED	
D922	LNJ306G5TUWQ	LED	
D923	LNJ306G5TUWQ	LED	
D924	LN1361CTR	LED	
D925	LN1361CTR	LED	
D926	LN1361CTR	LED	
D930	YEADRD47M2T1	Diode	
D931	YEADRD51M2T1	Diode	
D932	MA28T-ATX	Diode	

### INTERFACE BLOCK [E-8588B]

Ref. No.	Part No.	Part Name & Description	Remarks
D401	LN1461CTR	LED	
D411	LNJ306G5TUWQ	LED	
D412	LNJ306G5TUWQ	LED	
D413	LNJ306G5TUWQ	LED	
D451	MA151WA	Diode	

Ref. No.	Part No.	Part Name & Description	Remarks
D452	MA151WA	Diode	

### 1.3. Capacitors

#### MAIN/AMP BLOCK [E-6726A]

Ref. No.	Part No.	Part Name & Description	Remarks
C61	ECA1AM221B	Electrolytic, 220pF 10WV	
C62	YECUS1H103KX	Ceramic, 0.01pF 50WV	
C63	YECUS1E393KX	Ceramic, 0.039pF 25WV	
C66	YECUS1E393KX	Ceramic, 0.039pF 25WV	
C67	YECUS1E104ZF	Ceramic, 0.1pF 25WV	
C68	YECUS1E104ZF	Ceramic, 0.1pF 25WV	
C291	YECUS1H122KX	Ceramic, 0.0012pF 50WV	
C292	YECUS1H122KX	Ceramic, 0.0012pF 50WV	
C298	YECUS1CM225R	Tantalum, 2.2pF 16WV	
C389	ECA1CM470I	Electrolytic, 47pF 16WV	
C391	YECUS1H122KX	Ceramic, 0.0012pF 50WV	
C392	YECUS1H122KX	Ceramic, 0.0012pF 50WV	
C501	YECUS1H103KX	Ceramic, 0.01pF 50WV	
C502	YECUS1C474KX	Ceramic, 0.47pF 16WV	
C503	YECUS1H103KX	Ceramic, 0.01pF 50WV	
C504	ECA0JM331I	Electrolytic, 330pF 6.3WV	
C601	YECUS1H103KX	Ceramic, 0.01pF 50WV	
C602	ECA1CM470I	Electrolytic, 47pF 16WV	
C607	YECUS1E104ZF	Ceramic, 0.1pF 25WV	
C608	YECUS1C104KX	Ceramic, 0.1pF 16WV	
C610	YECUS1H181JM	Ceramic, 180pF 50WV	
C611	YECUS1H103KX	Ceramic, 0.01pF 50WV	
C612	ECA0JM331I	Electrolytic, 330pF 6.3WV	
C613	YECUS1H103KX	Ceramic, 0.01pF 50WV	
C614	ECA0JM331I	Electrolytic, 330pF 6.3WV	
C615	YECUS1C104KX	Ceramic, 0.1pF 16WV	
C616	YECUS1H180JC	Ceramic, 18pF 50WV	
C617	YECUS1H180JC	Ceramic, 18pF 50WV	
C618	ECCS5R5H473	Electrolytic, 0.047F5.5WV	
C619	YECUS1E104ZF	Ceramic, 0.1pF 25WV	
C621	ECA0JM331I	Electrolytic, 330pF 6.3WV	
C623	ECA1AM221B	Electrolytic, 220pF 10WV	
C627	YECUS1C224KX	Ceramic, 0.22pF 16WV	
C628	YECUS1C224KX	Ceramic, 0.22pF 16WV	
C629	YECUS1H103KX	Ceramic, 0.01pF 50WV	
C640	ECEA1AKA470B	Electrolytic, 47pF 10WV	
C641	YECUS1H102KX	Ceramic, 0.001pF 50WV	
C643	ECA1CM471	Electrolytic, 470pF 16WV	
C644	YECUS1E104ZF	Ceramic, 0.1pF 25WV	
C645	ECEA0JKA470B	Electrolytic, 47pF 6.3WV	
C646	YECUS1H103KX	Ceramic, 0.01pF 50WV	
C648	YECUSW0J226MS	Tantalum, 22pF 6.3WV	
C649	YECUSW1C105MU	Tantalum, 1pF 16WV	
C651	ECA1CM471	Electrolytic, 470pF 16WV	
C654	YECUS1C224KX	Ceramic, 0.22pF 16WV	
C655	YECUS1C224KX	Ceramic, 0.22pF 16WV	
C656	YECUS1E104ZF	Ceramic, 0.1pF 25WV	
C666	YECUS1H103KX	Ceramic, 0.01pF 50WV	
C680	YECUS1E104ZF	Ceramic, 0.1pF 25WV	
C683	YECUS1H103KX	Ceramic, 0.01pF 50WV	
C685	YECUS1H103KX	Ceramic, 0.01pF 50WV	
C698	YECUS1E104ZF	Ceramic, 0.1pF 25WV	
C701	YECUS1E104ZF	Ceramic, 0.1pF 25WV	
C702	YECUS1E104ZF	Ceramic, 0.1pF 25WV	
C703	ECA1CM471	Electrolytic, 470pF 16WV	
C704	ECA1CM471	Electrolytic, 470pF 16WV	
C706	ECA1CM471B	Electrolytic, 470pF 16WV	
C708	YECUS1C104KX	Ceramic, 0.1pF 16WV	
C710	YECUS1H103KX	Ceramic, 0.01pF 50WV	
C711	ECA1CM101B	Electrolytic, 100pF 16WV	
C712	YECUS1E104ZF	Ceramic, 0.1pF 25WV	
C713	YECUS1C334KX	Ceramic, 0.33pF 16WV	
C714	ECA1AM221B	Electrolytic, 220pF 10WV	
C715	YECUS1C104KX	Ceramic, 0.1pF 16WV	
C717	YECUS1H103KX	Ceramic, 0.01pF 50WV	
C718	YECUS1H103KX	Ceramic, 0.01pF 50WV	

Ref. No.	Part No.	Part Name & Description	Remarks
C720	ECA1CM470I	Electrolytic, 47pF 16WV	
C721	YECUS1H103KX	Ceramic, 0.01pF 50WV	
C722	ECA0JM101B	Electrolytic, 100pF 6.3WV	
C725	ECA1AM221I	Electrolytic, 220pF 10WV	
C726	YECUS1E104ZF	Ceramic, 0.1pF 25WV	
C727	YECUS1E104ZF	Ceramic, 0.1pF 25WV	
C731	ECA1CDT102BQ	Electrolytic, 1000pF 16WV	
C732	YECUS1C334KX	Ceramic, 0.33pF 16WV	
C733	YECUSW1C686MD	Tantalum, 68pF 16WV	
C734	YECUSW1E226MD	Tantalum, 22pF 25WV	
C736	YECUSW1E226MD	Tantalum, 22pF 25WV	
C742	YECUS1C334KX	Ceramic, 0.33pF 16WV	
C743	YECUSW1C686MD	Tantalum, 68pF 16WV	
C744	YECUSW1E226MD	Tantalum, 22pF 25WV	
C746	YECUSW1E226MD	Tantalum, 22pF 25WV	
C747	ECA1AM221B	Electrolytic, 220pF 10WV	
C748	ECA1AM471	Electrolytic, 470pF 10WV	
C749	YECUS1C104KX	Ceramic, 0.1pF 16WV	
C751	YECUS1H103KX	Ceramic, 0.01pF 50WV	
C761	YECUS1E104ZF	Ceramic, 0.1pF 25WV	
C762	YECUS1E104ZF	Ceramic, 0.1pF 25WV	
C763	ECA1CDT222U	Electrolytic, 2200pF 16WV	
C764	ECA1CDT222U	Electrolytic, 2200pF 16WV	

#### DSP BLOCK [E-8587B]

Ref. No.	Part No.	Part Name & Description	Remarks
C205	YECUSV1AM475R	Tantalum, 4.7pF 10WV	
C208	YECUZ1H270JC	Ceramic, 27pF 50WV	
C212	YECUSV1AM335R	Tantalum, 3.3pF 10WV	
C216	YECUSW1C106MS	Tantalum, 10pF 16WV	
C217	YECUZ1H181JC	Ceramic, 180pF 50WV	
C218	YECUSW1A106MA	Tantalum, 10pF 10WV	
C219	YECUZ1E104ZF	Ceramic, 0.1pF 25WV	
C220	YECUZ1H181JC	Ceramic, 180pF 50WV	
C221	YECUZ1H470JC	Ceramic, 47pF 50WV	
C223	YECUSW1E226MD	Tantalum, 22pF 25WV	
C224	YECUSW1E226MD	Tantalum, 22pF 25WV	
C225	YECUSW1A106MA	Tantalum, 10pF 10WV	
C226	YECUSW1A106MA	Tantalum, 10pF 10WV	
C229	YECUZ1H471KX	Ceramic, 470pF 50WV	
C233	YECUZ1H270JC	Ceramic, 27pF 50WV	
C235	YECUZ1H561KX	Ceramic, 560pF 50WV	
C240	YECUZ1H270JC	Ceramic, 27pF 50WV	
C241	YECUZ1H561KX	Ceramic, 560pF 50WV	
C242	YECUSW1A106MA	Tantalum, 10pF 10WV	
C243	YECUSW1A106MA	Tantalum, 10pF 10WV	
C244	YECUZ1H103KX	Ceramic, 0.01pF 50WV	
C245	YECUZ1H221JC	Ceramic, 220pF 50WV	
C246	YECUZ1H221JC	Ceramic, 220pF 50WV	
C247	YECUZ1H182KX	Ceramic, 0.0018pF 50WV	
C248	YECUZ1H122KX	Ceramic, 0.0012pF 50WV	
C249	YECUSW1A106MA	Tantalum, 10pF 10WV	
C250	YECUSW1A106MA	Tantalum, 10pF 10WV	
C271	YECUZ1H181JC	Ceramic, 180pF 50WV	
C272	YECUSW1A106MA	Tantalum, 10pF 10WV	
C273	YECUZ1H181JC	Ceramic, 180pF 50WV	
C281	YECUSW1E226MD	Tantalum, 22pF 25WV	
C282	YECUSW1D224MU	Tantalum, 0.22pF 20WV	
C283	YECUSW1D224MU	Tantalum, 0.22pF 20WV	
C299	YECUZ1H330JC	Ceramic, 33pF 50WV	
C300	YECUSW1C476MT	Tantalum, 47pF 16WV	
C301	YECUZ1E104ZF	Ceramic, 0.1pF 25WV	
C302	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C303	YECUSW1C476MT	Tantalum, 47pF 16WV	
C305	YECUSV1AM475R	Tantalum, 4.7pF 10WV	
C308	YECUZ1H270JC	Ceramic, 27pF 50WV	
C309	YECUSW1E226MD	Tantalum, 22pF 25WV	
C310	YECUZ1E104ZF	Ceramic, 0.1pF 25WV	
C312	YECUSV1AM335R	Tantalum, 3.3pF 10WV	
C314	YECUSW1E226MD	Tantalum, 22pF 25WV	
C315	YECUZ1H103KX	Ceramic, 0.01pF 50WV	
C317	YECUZ1H181JC	Ceramic, 180pF 50WV	
C318	YECUSW1A106MA	Tantalum, 10pF 10WV	

Ref. No.	Part No.	Part Name & Description	Remarks
C320	YECUZ1H181JC	Ceramic, 180pF 50WV	
C321	YECUZ1H470JC	Ceramic, 47pF 50WV	
C323	YECUZ1H103KX	Ceramic, 0.01pF 50WV	
C324	YECUZ1H103KX	Ceramic, 0.01pF 50WV	
C325	YECSW1A106MA	Tantalum, 10pF 10WV	
C326	YECSW1A106MA	Tantalum, 10pF 10WV	
C329	YECUZ1H471KX	Ceramic, 470pF 50WV	
C332	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C333	YECUZ1H270JC	Ceramic, 27pF 50WV	
C335	YECUZ1H561KX	Ceramic, 560pF 50WV	
C336	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C337	YECUZ1H103KX	Ceramic, 0.01pF 50WV	
C338	YECSW1C476MT	Tantalum, 47pF 16WV	
C340	YECUZ1H270JC	Ceramic, 27pF 50WV	
C341	YECUZ1H561KX	Ceramic, 560pF 50WV	
C342	YECSW1A106MA	Tantalum, 10pF 10WV	
C343	YECSW1A106MA	Tantalum, 10pF 10WV	
C345	YECUZ1H221JC	Ceramic, 220pF 50WV	
C346	YECUZ1H221JC	Ceramic, 220pF 50WV	
C347	YECUZ1H182KX	Ceramic, 0.0018pF 50WV	
C348	YECUZ1H122KX	Ceramic, 0.0012pF 50WV	
C349	YECSW1A106MA	Tantalum, 10pF 10WV	
C350	YECSW1A106MA	Tantalum, 10pF 10WV	
C371	YECUZ1H181JC	Ceramic, 180pF 50WV	
C372	YECSW1A106MA	Tantalum, 10pF 10WV	
C373	YECUZ1H181JC	Ceramic, 180pF 50WV	
C382	YECSW1D224MU	Tantalum, 0.22pF 20WV	
C383	YECSW1D224MU	Tantalum, 0.22pF 20WV	
C399	YECUZ1H330JC	Ceramic, 33pF 50WV	
C637	YECUZ1H103KX	Ceramic, 0.01pF 50WV	
C647	YECSW1C226MC	Tantalum, 22pF 16WV	
C660	YECUZ1E104ZF	Ceramic, 0.1pF 25WV	
C661	YECSW1C475MA	Tantalum, 4.7pF 16WV	
C662	YECUZ1E104ZF	Ceramic, 0.1pF 25WV	
C663	YECSW1C475MA	Tantalum, 4.7pF 16WV	
C664	YECUZ1E104ZF	Ceramic, 0.1pF 25WV	
C665	F3H1D4760001	Tantalum, 47pF 20WV	
C671	YECUZ1E104ZF	Ceramic, 0.1pF 25WV	
C672	YECSW1C475MA	Tantalum, 4.7pF 16WV	
C673	YECUZ1E104ZF	Ceramic, 0.1pF 25WV	
C674	YECSW1A106MA	Tantalum, 10pF 10WV	
C675	YECUZ1E104ZF	Ceramic, 0.1pF 25WV	
C676	F3H1D4760001	Tantalum, 47pF 20WV	
C752	YECSW1C226MC	Tantalum, 22pF 16WV	
C753	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C756	YECSW1A226MS	Tantalum, 22pF 10WV	
C757	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C801	YECUZ1E104ZF	Ceramic, 0.1pF 25WV	
C802	YECUZ1E104ZF	Ceramic, 0.1pF 25WV	
C803	YECUZ1H220JC	Ceramic, 22pF 50WV	
C804	YECUZ1H220JC	Ceramic, 22pF 50WV	
C805	YECUZ1E104ZF	Ceramic, 0.1pF 25WV	
C806	YECUZ1E104ZF	Ceramic, 0.1pF 25WV	
C807	YECUZ1E104ZF	Ceramic, 0.1pF 25WV	
C808	YECUZ1E104ZF	Ceramic, 0.1pF 25WV	
C809	YECUZ1E104ZF	Ceramic, 0.1pF 25WV	
C810	YECSW1A106MA	Tantalum, 10pF 10WV	
C811	YECSW1C686MD	Tantalum, 68pF 16WV	
C812	YECUZ1E104ZF	Ceramic, 0.1pF 25WV	
C813	YECSW1A106MA	Tantalum, 10pF 10WV	
C814	YECUZ1E104ZF	Ceramic, 0.1pF 25WV	
C815	YECUZ1E104ZF	Ceramic, 0.1pF 25WV	
C816	YECSW1C106MS	Tantalum, 10pF 16WV	
C823	YECSW1C106MS	Tantalum, 10pF 16WV	
C824	YECUZ1E104ZF	Ceramic, 0.1pF 25WV	
C825	YECUZ1E104ZF	Ceramic, 0.1pF 25WV	
C826	YECUZ1H332KX	Ceramic, 0.033pF 50WV	
C827	YECUZ1H332KX	Ceramic, 0.033pF 50WV	
C828	YECSW1A106MA	Tantalum, 10pF 10WV	
C850	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C851	YECSW1C476MT	Tantalum, 47pF 16WV	
C858	YECSW1E226MD	Tantalum, 22pF 25WV	
C859	YECUZ1E104ZF	Ceramic, 0.1pF 25WV	

Ref. No.	Part No.	Part Name & Description	Remarks
C860	YECUZ1E104ZF	Ceramic, 0.1pF 25WV	
C861	YECSW1C686MD	Tantalum, 68pF 16WV	
C867	YECUZ1E104ZF	Ceramic, 0.1pF 25WV	
C868	YECUZ1E104ZF	Ceramic, 0.1pF 25WV	
C869	YECSW1C686MD	Tantalum, 68pF 16WV	
C872	YECSW1A106MA	Tantalum, 10pF 10WV	
C874	YECSW1A106MA	Tantalum, 10pF 10WV	
C876	YECSW1A106MA	Tantalum, 10pF 10WV	
C878	YECSW1A106MA	Tantalum, 10pF 10WV	

## DISPLAY BLOCK [E-8589A]

Ref. No.	Part No.	Part Name & Description	Remarks
C901	YECUS1C104KX	Ceramic, 0.1pF 16WV	
C902	YECUS1C104KX	Ceramic, 0.1pF 16WV	
C903	YECUS1H681JM	Ceramic, 680pF 50WV	
C904	YECUS1C104KX	Ceramic, 0.1pF 16WV	
C905	YECUS1C104KX	Ceramic, 0.1pF 16WV	
C906	YECUS1C104KX	Ceramic, 0.1pF 16WV	
C907	YECUS1C104KX	Ceramic, 0.1pF 16WV	
C908	YECUS1C104KX	Ceramic, 0.1pF 16WV	
C909	YECUS1C104KX	Ceramic, 0.1pF 16WV	
C914	YECUS1H221JM	Ceramic, 220pF 50WV	
C931	ECEV1CA220SR	Electrolytic, 22pF 16WV	
C932	YECUS1C104KX	Ceramic, 0.1pF 16WV	
C933	YECUM2A683JN	Plastic Film, 0.068pF 100WV	
C941	YECUS1C224KX	Ceramic, 0.22pF 16WV	
C942	YECUS1C224KX	Ceramic, 0.22pF 16WV	
C943	YECUS1H102JM	Ceramic, 0.001pF 50WV	
C944	YECV1EM105R	Tantalum, 1pF 25WV	
C945	YECV1CM225R	Tantalum, 2.2pF 16WV	

## INTERFACE BLOCK [E-8588B]

Ref. No.	Part No.	Part Name & Description	Remarks
C400	YECUS1C104KX	Ceramic, 0.1pF 16WV	
C401	YECUS1C104KX	Ceramic, 0.1pF 16WV	
C411	YECUS1C334KX	Ceramic, 0.33pF 16WV	
C412	YECSW1E226MD	Tantalum, 22pF 25WV	
C413	YECUS1C104KX	Ceramic, 0.1pF 16WV	
C421	YECUS1C104KX	Ceramic, 0.1pF 16WV	

## 1.4. Resistors

## MAIN/AMP BLOCK [E-6726A]

Ref. No.	Part No.	Part Name & Description	Remarks
R62	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R63	ERJ3GEYJ104V	Chip, 100k $\Omega$ 1/16W	
R66	ERJ6GEYJ822	Chip, 8.2k $\Omega$ 1/10W	
R68	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R101	ERJ8GEYJ5R6V	Chip, 5.6k $\Omega$ 1/8W	
R401	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R402	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R404	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R406	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R501	ERJ6GEYJ683	Chip, 68k $\Omega$ 1/10W	
R502	ERJ6GEYJ393	Chip, 39k $\Omega$ 1/10W	
R504	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R511	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R568	ERJ3GEYJ101V	Chip, 100 $\Omega$ 1/16W	
R570	ERJ3GEYJ101V	Chip, 100 $\Omega$ 1/16W	
R600	ERJ3GEYJ333V	Chip, 33k $\Omega$ 1/16W	
R601	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R602	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R603	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R604	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R605	ERJ3GEYJ154V	Chip, 150k $\Omega$ 1/16W	
R606	ERJ3GEYJ273V	Chip, 27k $\Omega$ 1/16W	
R608	ERJ3GEYJ472V	Chip, 4.7k $\Omega$ 1/16W	
R612	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R614	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R615	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R616	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
R617	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R618	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R619	ERJ3GEYJ101V	Chip, 100 $\Omega$ 1/16W	
R620	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R621	ERJ3GEYJ473V	Chip, 47k $\Omega$ 1/16W	
R622	ERJ6GEYJ563	Chip, 56k $\Omega$ 1/10W	
R623	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R627	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R628	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R631	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R632	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R633	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R634	ERJ14YJ100H	Chip, 10 $\Omega$ 1/4W	
R636	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R637	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R638	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R639	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R640	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R641	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R642	ERJ3GEYJ104V	Chip, 100k $\Omega$ 1/16W	
R643	ERJ6GEYJ104	Chip, 100k $\Omega$ 1/10W	
R644	ERJ6GEYJ104	Chip, 100k $\Omega$ 1/10W	
R648	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R649	ERJ6GEYJ223	Chip, 22k $\Omega$ 1/10W	
R650	ERJ3GEYJ104V	Chip, 100k $\Omega$ 1/16W	
R651	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R652	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R653	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R657	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R660	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R661	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R663	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R664	ERJ6GEYJ332	Chip, 3.3k $\Omega$ 1/10W	
R665	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R666	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R673	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R674	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R675	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R677	ERJ3GEYJ272V	Chip, 2.7k $\Omega$ 1/16W	
R678	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R679	ERJ3GEYJ272V	Chip, 2.7k $\Omega$ 1/16W	
R680	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R681	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R682	ERJ3GEYJ362V	Chip, 3.6k $\Omega$ 1/16W	
R683	ERJ3GEYJ362V	Chip, 3.6k $\Omega$ 1/16W	
R684	ERJ3GEYJ362V	Chip, 3.6k $\Omega$ 1/16W	
R688	ERJ3GEYJ223V	Chip, 22k $\Omega$ 1/16W	
R689	ERJ3GEYJ272V	Chip, 2.7k $\Omega$ 1/16W	
R690	ERJ3GEYJ473V	Chip, 47k $\Omega$ 1/16W	
R694	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R695	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R696	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R697	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R698	ERJ6GEYJ224	Chip, 220k $\Omega$ 1/10W	
R699	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R701	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R702	ERJ3GEYJ473V	Chip, 47k $\Omega$ 1/16W	
R706	ERJ12YJ681H	Chip, 680 $\Omega$ 1/2W	
R707	ERJ12YJ681H	Chip, 680 $\Omega$ 1/2W	
R709	ERJ12YJ4R7H	Chip, 4.7 $\Omega$ 1/2W	
R711	ERJ6GEYJ152	Chip, 1.5k $\Omega$ 1/10W	
R712	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R713	ERJ6GEYJ332	Chip, 3.3k $\Omega$ 1/10W	
R714	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R720	ERJ14YJ100H	Chip, 10 $\Omega$ 1/4W	
R721	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R730	ERJ12YJ4R7H	Chip, 4.7 $\Omega$ 1/2W	
R731	ERJ6GEYJ331	Chip, 330 $\Omega$ 1/10W	
R734	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	

## DSP BLOCK [E-8587B]

Ref. No.	Part No.	Part Name & Description	Remarks
R60	ERJ3GEYJ273V	Chip, 27k $\Omega$ 1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R61	ERJ3GEYJ273V	Chip, 27k $\Omega$ 1/16W	
R64	ERJ3GEYJ472V	Chip, 4.7k $\Omega$ 1/16W	
R65	ERJ3GEYJ472V	Chip, 4.7k $\Omega$ 1/16W	
R206	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R208	ERJ3GEYJ221V	Chip, 220 $\Omega$ 1/16W	
R209	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R210	ERJ3GEYJ563V	Chip, 56k $\Omega$ 1/16W	
R211	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R212	ERJ3GEYJ104V	Chip, 100k $\Omega$ 1/16W	
R213	ERJ3GEYJ123V	Chip, 12k $\Omega$ 1/16W	
R214	ERJ3GEYJ153V	Chip, 15k $\Omega$ 1/16W	
R215	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R216	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R217	ERJ3GEYJ183V	Chip, 18k $\Omega$ 1/16W	
R219	ERJ3GEYJ153V	Chip, 15k $\Omega$ 1/16W	
R220	ERJ3GEYJ104V	Chip, 100k $\Omega$ 1/16W	
R221	ERJ3GEYJ104V	Chip, 100k $\Omega$ 1/16W	
R222	ERJ3GEYJ432V	Chip, 4.3k $\Omega$ 1/16W	
R223	ERJ3GEYJ473V	Chip, 47k $\Omega$ 1/16W	
R224	ERJ3GEYJ334V	Chip, 330k $\Omega$ 1/16W	
R225	ERJ3GEYJ334V	Chip, 330k $\Omega$ 1/16W	
R226	ERJ3GEYJ473V	Chip, 47k $\Omega$ 1/16W	
R227	ERJ3GEYJ106V	Chip, 10M $\Omega$ 1/16W	
R232	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R234	ERJ3GEYJ333V	Chip, 33k $\Omega$ 1/16W	
R235	ERJ3GEYJ822V	Chip, 8.2k $\Omega$ 1/16W	
R238	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R240	ERJ3GEYJ473V	Chip, 47k $\Omega$ 1/16W	
R241	ERJ3GEYJ473V	Chip, 47k $\Omega$ 1/16W	
R242	ERJ3GEYJ153V	Chip, 15k $\Omega$ 1/16W	
R245	ERJ3GEYJ221V	Chip, 220 $\Omega$ 1/16W	
R247	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R256	ERJ3GEYJ123V	Chip, 12k $\Omega$ 1/16W	
R260	ERJ3GEYJ153V	Chip, 15k $\Omega$ 1/16W	
R264	ERJ3GEYJ682V	Chip, 6.8k $\Omega$ 1/16W	
R265	ERJ3GEYJ273V	Chip, 27k $\Omega$ 1/16W	
R268	ERJ3GEYJ223V	Chip, 22k $\Omega$ 1/16W	
R269	ERJ3GEYJ331V	Chip, 330 $\Omega$ 1/16W	
R270	ERJ3GEYJ154V	Chip, 150k $\Omega$ 1/16W	
R271	ERJ3GEYJ154V	Chip, 150k $\Omega$ 1/16W	
R274	ERJ3GEYJ272V	Chip, 2.7k $\Omega$ 1/16W	
R275	ERJ3GEYJ222V	Chip, 2.2k $\Omega$ 1/16W	
R278	ERJ3GEYJ332V	Chip, 3.3k $\Omega$ 1/16W	
R279	ERJ3GEYJ472V	Chip, 4.7k $\Omega$ 1/16W	
R281	ERJ3GEYJ183V	Chip, 18k $\Omega$ 1/16W	
R282	ERJ3GEYJ153V	Chip, 15k $\Omega$ 1/16W	
R300	ERJ3GEYJ101V	Chip, 100 $\Omega$ 1/16W	
R301	ERJ3GEYJ101V	Chip, 100 $\Omega$ 1/16W	
R302	ERJ3GEYJ101V	Chip, 100 $\Omega$ 1/16W	
R306	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R310	ERJ3GEYJ563V	Chip, 56k $\Omega$ 1/16W	
R311	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R312	ERJ3GEYJ104V	Chip, 100k $\Omega$ 1/16W	
R313	ERJ3GEYJ123V	Chip, 12k $\Omega$ 1/16W	
R314	ERJ3GEYJ153V	Chip, 15k $\Omega$ 1/16W	
R315	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R316	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R317	ERJ3GEYJ183V	Chip, 18k $\Omega$ 1/16W	
R318	ERJ3GEYJ101V	Chip, 100 $\Omega$ 1/16W	
R319	ERJ3GEYJ153V	Chip, 15k $\Omega$ 1/16W	
R320	ERJ3GEYJ104V	Chip, 100k $\Omega$ 1/16W	
R321	ERJ3GEYJ104V	Chip, 100k $\Omega$ 1/16W	
R322	ERJ3GEYJ432V	Chip, 4.3k $\Omega$ 1/16W	
R323	ERJ3GEYJ473V	Chip, 47k $\Omega$ 1/16W	
R324	ERJ3GEYJ334V	Chip, 330k $\Omega$ 1/16W	
R325	ERJ3GEYJ334V	Chip, 330k $\Omega$ 1/16W	
R326	ERJ3GEYJ473V	Chip, 47k $\Omega$ 1/16W	
R327	ERJ3GEYJ106V	Chip, 10M $\Omega$ 1/16W	
R332	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R334	ERJ3GEYJ333V	Chip, 33k $\Omega$ 1/16W	
R335	ERJ3GEYJ822V	Chip, 8.2k $\Omega$ 1/16W	
R336	ERJ3GEYJ221V	Chip, 220 $\Omega$ 1/16W	
R337	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	



Ref. No.	Part No.	Part Name & Description	Remarks
R338	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R342	ERJ3GEYJ153V	Chip, 15k $\Omega$ 1/16W	
R345	ERJ3GEYJ221V	Chip, 220 $\Omega$ 1/16W	
R347	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R356	ERJ3GEYJ123V	Chip, 12k $\Omega$ 1/16W	
R360	ERJ3GEYJ153V	Chip, 15k $\Omega$ 1/16W	
R364	ERJ3GEYJ682V	Chip, 6.8k $\Omega$ 1/16W	
R365	ERJ3GEYJ273V	Chip, 27k $\Omega$ 1/16W	
R368	ERJ3GEYJ223V	Chip, 22k $\Omega$ 1/16W	
R369	ERJ3GEYJ331V	Chip, 330 $\Omega$ 1/16W	
R370	ERJ3GEYJ154V	Chip, 150k $\Omega$ 1/16W	
R371	ERJ3GEYJ154V	Chip, 150k $\Omega$ 1/16W	
R374	ERJ3GEYJ222V	Chip, 2.2k $\Omega$ 1/16W	
R375	ERJ3GEYJ272V	Chip, 2.7k $\Omega$ 1/16W	
R378	ERJ3GEYJ332V	Chip, 3.3k $\Omega$ 1/16W	
R379	ERJ3GEYJ472V	Chip, 4.7k $\Omega$ 1/16W	
R381	ERJ3GEYJ183V	Chip, 18k $\Omega$ 1/16W	
R382	ERJ3GEYJ153V	Chip, 15k $\Omega$ 1/16W	
R610	ERJ3GEYJ101V	Chip, 100 $\Omega$ 1/16W	
R611	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R613	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R625	ERJ3GEYJ473V	Chip, 47k $\Omega$ 1/16W	
R646	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R647	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R654	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R655	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R656	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R659	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R667	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R668	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R669	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R670	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R671	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R672	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R676	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R685	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R686	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R687	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R691	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R692	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R693	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R803	ERJ3GEYJ472V	Chip, 4.7k $\Omega$ 1/16W	
R804	ERJ3GEYJ101V	Chip, 100 $\Omega$ 1/16W	
R808	ERJ3GEYJ472V	Chip, 4.7k $\Omega$ 1/16W	
R809	ERJ3GEYJ472V	Chip, 4.7k $\Omega$ 1/16W	
R810	ERJ3GEYJ331V	Chip, 330 $\Omega$ 1/16W	
R850	ERJ3GEYJ101V	Chip, 100 $\Omega$ 1/16W	
R851	ERJ3GEYJ101V	Chip, 100 $\Omega$ 1/16W	

## DISPLAY BLOCK [E-8589A]

Ref. No.	Part No.	Part Name & Description	Remarks
R900	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R901	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R902	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R903	ERJ6GEYJ433	Chip, 43k $\Omega$ 1/10W	
R905	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R906	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R907	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R910	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R911	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R912	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R913	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R914	ERJ6GEYJ333	Chip, 33k $\Omega$ 1/10W	
R920	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R921	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R922	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R923	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R930	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R931	ERJ6GEYJ271	Chip, 270 $\Omega$ 1/10W	
R932	ERJ6GEYJ271	Chip, 270 $\Omega$ 1/10W	
R935	ERJ6GEYJ332	Chip, 3.3k $\Omega$ 1/10W	
R936	ERJ6GEYJ332	Chip, 3.3k $\Omega$ 1/10W	
R942	ERJ6GEYJ101	Chip, 100 $\Omega$ 1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
R943	ERJ6GEYJ561	Chip, 560 $\Omega$ 1/10W	
R944	ERJ6GEYJ271	Chip, 270 $\Omega$ 1/10W	

## INTERFACE BLOCK [E-8588B]

Ref. No.	Part No.	Part Name & Description	Remarks
R400	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R403	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R405	ERJ6GEYJ101	Chip, 100 $\Omega$ 1/10W	
R407	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R408	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R410	ERJ6GEYJ184	Chip, 180k $\Omega$ 1/10W	
R421	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R422	ERJ6GEYJ104	Chip, 100k $\Omega$ 1/10W	
R423	ERJ6GEYJ273	Chip, 27k $\Omega$ 1/10W	
R424	ERJ6GEYJ472	Chip, 4.7k $\Omega$ 1/10W	
R431	ERJ6GEYJ152	Chip, 1.5k $\Omega$ 1/10W	
R432	ERJ6GEYJ271	Chip, 270 $\Omega$ 1/10W	
R451	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	

## 1.5. Connectors

## MAIN/AMP BLOCK [E-6726A]

Ref. No.	Part No.	Part Name & Description	Remarks
CN251	YEA9230B109	Connector, 9P	
CN253	YEA9230B115	Connector, 15P	
CN501	YEAETKCF14PS	Connector, 14P	
CN601	YEA9012809	Connector, 8P	
CN705	YEA9012748	Connector, 16P	
CP251	YEA9120S09	Connector, 9P	
CP252	YEAETKCF10QS	Connector, 10P	
CP253	YEA9120S15	Connector, 15P	
CP651	YEAETKCF18QS	Connector, 18P	
CP652	YEAETKCF18QS	Connector, 18P	

## DSP BLOCK [E-8587B]

Ref. No.	Part No.	Part Name & Description	Remarks
CN202	K2KY49Z00001	Connector, RCAx2	
CN203	YEA9012571	Connector, RCAx2	
CN252	YEAETKCF10PS	Connector, 10P	
CN303	YEA9012571	Connector, RCAx2	
CN304	K2KY49Z00001	Connector, RCAx2	
CN603	YEA95227114	Connector, 14P	
CN604	YEA95220714	Connector, 14P	
CN651	YEAETKCF18RS	Connector, 18P	
CN652	YEAETKCF18RS	Connector, 18P	

## INTERFACE BLOCK [E-8588B]

Ref. No.	Part No.	Part Name & Description	Remarks
CP501	YEAETKCF14XS	Connector, 14P	

## 1.6. Electric Parts

## SWITCHES

Ref. No.	Part No.	Part Name & Description	Remarks
SW901	KOH1BA000083	Switch	
SW902	KOH1BA000083	Switch	
SW903	KOH1BA000083	Switch	
SW904	KOH1BA000083	Switch	
SW905	KOH1BA000083	Switch	
SW906	KOH1BA000083	Switch	
SW907	KOH1BA000083	Switch	
SW908	KOH1BA000083	Switch	
SW909	KOH1BA000083	Switch	
SW910	KOH1BA000083	Switch	
SW911	KOH1BA000083	Switch	
SW912	KOH1BA000083	Switch	
SW913	KOH1BA000083	Switch	
SW914	KOH1BA000083	Switch	
SW915	KOH1BA000083	Switch	
SW916	KOH1BA000083	Switch	

Ref. No.	Part No.	Part Name & Description	Remarks
SW917	KOH1BA000083	Switch	
SW918	KOH1BA000083	Switch	
SW400	YEAS09304	Switch	
SW401	YEAS09304	Switch	
SW402	YEAS09304	Switch	
SW403	KOF111A000083	Switch	

## CRYSTALS

Ref. No.	Part No.	Part Name & Description	Remarks
XL501	YEXLCR838M5T	Crystal OSC	
XL602	YEXL49U0419	Crystal OSC	
XL801	YEXL49U21477	Crystal OSC	

## COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L52	YELTBIM21A10	Coil	
L61	YELTBIM21A10	Coil	
L62	YELTBIM21A10	Coil	
L101	YELT03A330KT	Coil	
L501	YELT03N101JT	Coil	
L601	YELT03N101JT	Coil	
L602	YELT03N101JT	Coil	
L604	YELT03N101JT	Coil	
L611	YELTBIM21A10	Coil	
L706	YELT03N101JT	Coil	
L707	ELEY330KA	Coil	
L711	YELTBIM21A10	Coil	
L712	G1CYYYZ00003	Coil	
L713	G1CYYYZ00003	Coil	
L721	YELTBIM21A10	Coil	
L201	YELTBIM21A10	Coil	
L203	YELTBIM21A10	Coil	
L205	YELTBIM1B601	Coil	
L206	YELTBIM1B601	Coil	
L210	G1CYYYZ00003	Coil	
L211	YELTBIM1B601	Coil	
L301	YELTBIM21A10	Coil	
L302	YELTBIM21A10	Coil	
L303	YELTBIM21A10	Coil	
L305	YELTBIM1B601	Coil	
L306	YELTBIM1B601	Coil	
L310	G1CYYYZ00003	Coil	
L311	YELTBIM1B601	Coil	
L701	YELT03N101JT	Coil	
L702	YELT03N101JT	Coil	
L704	YELT03N2R7KT	Coil	
L751	G1CYYYZ00003	Coil	
L752	G1CYYYZ00003	Coil	
L801	YELTBIM21A10	Coil	
L802	YELTBIM21A10	Coil	
L803	YELTBIM21A10	Coil	
L804	YELTBIM21A10	Coil	
L805	YELTBIM21A10	Coil	
L806	YELTBIM21A10	Coil	
L807	G1CYYYZ00003	Coil	
L808	G1CYYYZ00003	Coil	
L931	YELTD75F101T	Coil	
L932	YELT216825TG	Coil	

## LCD

Ref. No.	Part No.	Part Name & Description	Remarks
LCD901	L5ACCLC00001	LCD Display	

## LAMPS

Ref. No.	Part No.	Part Name & Description	Remarks
Z51	YEAL02010T	Neon Lamp	
CFL931	A2CA00000003	Display Tube	

## THERMISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
PH701	YERT7AR4R7MT	Thermistor	

## THERMISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
PH702	YERT7AR4R7MT	Thermistor	

## 1.7. Accessories

## PRINTING

Ref. No.	Part No.	Part Name & Description	Remarks
	YEFM283318	Operating Instructions	

## INSTALLATION PARTS

Ref. No.	Part No.	Part Name & Description	Remarks
	YEAJ02802	Power Cord	
	CR2032/1F	Battery	
	YEP9FZ2714	Screws	
	YEFAL31302	Case, Detachable Unit	
	YEFG04019	Rear Support Strap	
	YEFX9992008	Remote Controller	
	YEFX0214198	Mounting Collar	

## 1.8. Mechanical Parts

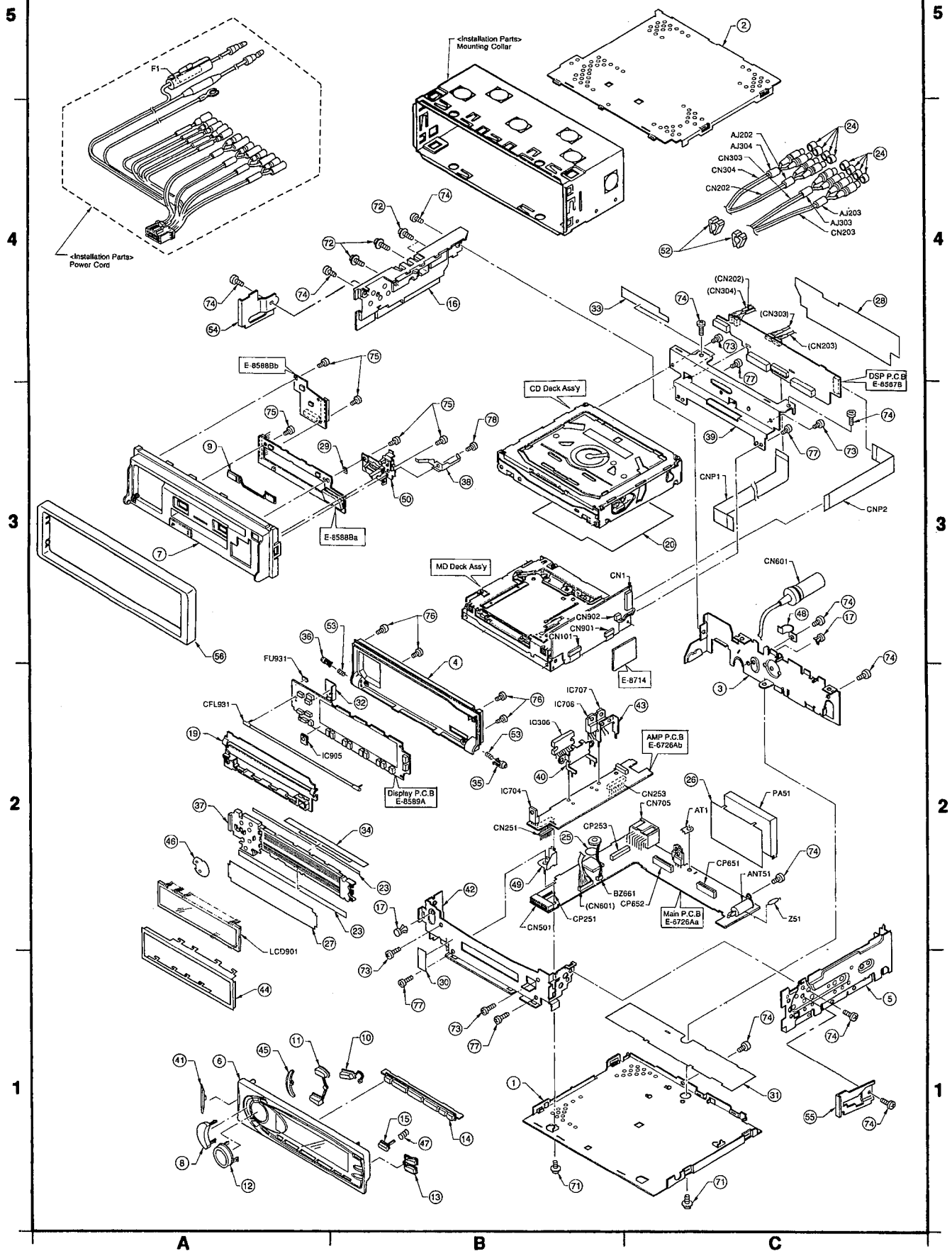
## MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
F1	XBB1F100NS5	Fuse, 10A	
FU931	YEAFFSFCOR4A	Fuse, 0.4A	
AJ202	YEAJ8VW3509	Tube, PRE-OUT	
AJ203	YEAJ8VW3504	Tube, CD/MD.C-IN	
AJ303	YEAJ8VW3503	Tube, AUX-IN	
AJ304	YEAJ8VW3002	Tube, REAR	
ANT51	YEEAL0060	Antenna Receptacle	
AT1	K4ZZ01000048	Terminal	
BZ661	YEXBPKM354A9	Buzzer	
CNP1	K1MN14B00027	Connector, 14P	
CNP2	YEAET14B100A	Connector, 14P	
1	YEFA05733	Bottom Cover	(1-B)
2	YEFA031673	Upper Cover	(5-C)
3	YEFA08477	Rear Plate	(2-C)
4	YEFA131439	Cover, Detachable	(2-B)
5	YEFA09630	Side Plate	(1-C)
6	YEFC026326	Escutcheon Ass'y, Detachable	(1-A)
7	YEFC026327	Escutcheon Ass'y, Unit	(3-A)
8	YEFE135435	Button, VOL	(1-A)
9	YEFE135487	Button, EJECT	(3-A)
10	YEFE135436	Button, SEL	(1-B)
11	YEFE135437	Button, BAND/SOURCE	(1-A)
12	YEFE135439	Button, TUNE/TRACK	(1-A)
13	YEFE135440	Button, DIMMER/DISP	(1-B)
14	YEFE135531A	Button, PRESET	(1-B)
15	YEFE135486	Button, OPEN A	(1-B)
16	YEFF01964	Heat Sink	(4-B)
17	YEFJ05030	Color Rivet	(2-B) (3-C)
19	YEFK06851	Holder, LCD	(2-A)
20	YEFL02635	Spacer	(3-C)
23	YEFR07107	Rubber Contact	(2-B)
24	YEFR04187	Lead Cap	(4-C)
25	YEFS01512	Pad	(2-B)
26	YEFV03526	Magnetic Shield, PA51	(2-C)
27	YEFV021599	Optical Shade	(2-A)
28	YEFV03494	Magnetic Shield, CD	(4-C)
29	YEFV011960	Insulator, Display	(3-A)
30	YEFV011961	Insulator, Main	(1-B)
31	YEFV011963	Insulator	(1-C)
32	YEFV03500	Magnetic Shield	(2-B)
33	YEFV011962	Insulator	(4-B)
34	YEFV021600	Optical Shade	(2-B)
35	YEFW04156	Shaft Collar(L)	(2-B)
36	YEFW04157	Shaft Collar(R)	(3-A)
37	YEFX0011912A	Transparent Plate	(2-A)
38	YEFX0052405A	Spring	(3-B)
39	YEFX0214641A	Bracket, Deck (R)	(3-C)

Ref. No.	Part No.	Part Name & Description	Remarks
40	YEFX0214643	Bracket, IC	(2-B)
41	YEFX0011904	Transparent Plate	(1-A)
42	YEFX0214642	Bracket, Deck (F)	(2-B)
43	YEFX0214644	Bracket, Regulator	(2-C)
44	YEFX0214645	Bracket, LCD	(1-A)
45	YEFX0011905	Transparent Plate	(1-A)
46	YEFX025137A	Color Screen	(2-A)
47	YEFX0052396	Spring	(1-B)
48	YEFX007146	Cord Clamper	(3-C)
49	YEFX0214678	Bracket	(2-B)
50	YEP9FX084	Hook Bracket Ass'y	(3-B)
52	YEFX007565	Cord Clamper	(4-C)
53	YEFX0052253	Spring	(2-B) (3-B)
54	YEFX0214786	Bracket (L)	(4-A)
55	YEFX0214282	Bracket (R)	(1-C)
56	YEFX05569	Trim Plate	(3-A)
71	YEJT03009	Tapping Screw, 3mm*8mm	(1-B) (1-C)
72	YEJS05030	Screw, 3mm*12mm	(4-B)
73	YEJT03131	Tapping Screw, 2.6mm*5mm	
74	XTB3+6FFX	Tapping Screw, 3mm*6mm	
75	XTB2+5GFX	Tapping Screw, 2mm*5mm	
76	XTN2+8GFZ	Tapping Screw, 2mm*8mm	(2-B) (3-B)
77	XSB26+4FZ	Screw, 2.6mm*4mm	
78	XTB2+6GFX	Tapping Screw, 2mm*6mm	(3-B)

## EXPLODED VIEW (UNIT)

Numbers in ○ are indicated REF. No. in the REPLACEMENT PARTS LIST



A

B

C

## 2 CD Player Parts

Note :

1. Be sure to make your orders of replacement parts according to this list.
2. Important safety notice: Components, identified by  $\Delta$  mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. Location keys in the remarks column indicates the general location of the parts shown in the exploded drawing, as in a road map.

### 2.1. IC's and Transistors

CD SERVO BLOCK [E-8400]

Ref. No.	Part No.	Part Name & Description	Remarks
IC101	YEAMCXA2535N	IC	
IC201	YEAMCXD2587Q	IC	
IC451	YEAMM471377M	IC	
IC901	YEAMBA6840AF	IC	
IC951	YEAMBA5971FP	IC	
Q101	2SB766ATX	Transistor	
Q401	YEANA114EKT	Transistor	

DISC GUIDE FPC BLOCK [E-2637]

Ref. No.	Part No.	Part Name & Description	Remarks
Q1	PN147	Transistor	
Q2	PN147	Transistor	
Q3	PN147	Transistor	
Q4	PN147	Transistor	
Q5	PN147	Transistor	

### 2.2. Diodes

CD SERVO BLOCK [E-8400]

Ref. No.	Part No.	Part Name & Description	Remarks
D401	YEAD1SS355T1	Diode	
D402	MA151ATX	Diode	
D451	MA151WKT	Diode	
D901	LN1271RAL	LED	
D902	LN1271RAL	LED	
D903	LN1271RAL	LED	
D904	LN1271RAL	LED	
D905	LN1271RAL	LED	

### 2.3. Capacitors

CD SERVOBLOCK [E-8400]

Ref. No.	Part No.	Part Name & Description	Remarks
C101	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C102	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C104	YECV0JT226L	Tantalum, 22 $\mu$ F 6.3WV	
C105	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C106	YECUZ1H101JC	Ceramic, 100pF 50WV	
C107	YECUS1C105ZF	Ceramic, 1 $\mu$ F 16WV	
C108	YECUZ1H330JC	Ceramic, 33pF 50WV	
C109	YECUZ1H390JM	Ceramic, 39pF 50WV	
C110	YECUZ1H102KX	Ceramic, 0.001 $\mu$ F 50WV	
C111	YECV1CT106R	Ceramic, 10pF 16WV	
C112	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C113	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C114	YECUZ1H152KX	Ceramic, 0.0015 $\mu$ F 50WV	
C115	YECUZ1H331JM	Ceramic, 330pF 50WV	
C116	YECUZ1H472KX	Ceramic, 0.0047 $\mu$ F 50WV	
C117	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C118	YECUZ1H030CC	Ceramic, 3pF 50WV	
C120	EEFCD0K8R2R	Electrolytic, 8.2 $\mu$ F 8WV	

Ref. No.	Part No.	Part Name & Description	Remarks
C401	YECV1CT106R	Ceramic, 10pF 16WV	
C402	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C403	YECUZ1C473KX	Ceramic, 0.047 $\mu$ F 16WV	
C404	YECUZ1H152KX	Ceramic, 0.0015 $\mu$ F 50WV	
C405	YECUZ1H221JM	Ceramic, 220pF 50WV	
C406	YECUS1C474KX	Ceramic, 0.47 $\mu$ F 16WV	
C407	YECUZ1E103KX	Ceramic, 0.01 $\mu$ F 25WV	
C408	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C410	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C411	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C413	YECV1CT106R	Tantalum, 10pF 16WV	
C414	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C453	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C454	YECV1CT106R	Tantalum, 10pF 16WV	
C455	YECUZ1E103KX	Ceramic, 0.01 $\mu$ F 25WV	
C901	YECUZ1E103KX	Ceramic, 0.01 $\mu$ F 25WV	
C902	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C903	ECEH1CVC220F	Electrolytic, 22 $\mu$ F 16WV	
C906	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C951	YECUZ1H222KX	Ceramic, 0.0022 $\mu$ F 50WV	
C952	YECUZ1H222KX	Ceramic, 0.0022 $\mu$ F 50WV	
C953	YECUZ1H222KX	Ceramic, 0.0022 $\mu$ F 50WV	
C954	YECUZ1H222KX	Ceramic, 0.0022 $\mu$ F 50WV	
C955	ECEH1CVC220F	Electrolytic, 22 $\mu$ F 16WV	
C956, 957	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C958, 959	YECUZ1C333KX	Ceramic, 0.033 $\mu$ F 16WV	

### 2.4. Resistors

CD SERVO BLOCK [E-8400]

Ref. No.	Part No.	Part Name & Description	Remarks
R102	ERJ3GEYJ122V	Chip, 1.2k $\Omega$ 1/16W	
R103	ERJ12YJ270H	Chip, 27 $\Omega$ 1/2W	
R104	ERJ3GEYJ223V	Chip, 22k $\Omega$ 1/16W	
R105	ERJ3GEYJ223V	Chip, 22k $\Omega$ 1/16W	
R106	ERJ3GEYJ104V	Chip, 100k $\Omega$ 1/16W	
R107	ERJ3GEYJ333V	Chip, 33k $\Omega$ 1/16W	
R108	ERJ3GEYJ333V	Chip, 33k $\Omega$ 1/16W	
R109	ERJ3GEYJ684V	Chip, 680k $\Omega$ 1/16W	
R111	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R112	ERJ3GEYJ272V	Chip, 2.7k $\Omega$ 1/16W	
R113	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R114	ERJ3GEYJ124V	Chip, 120k $\Omega$ 1/16W	
R115	ERJ3GEYJ101V	Chip, 100 $\Omega$ 1/16W	
R116	ERJ3GEYJ101V	Chip, 100 $\Omega$ 1/16W	
R117	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R118	ERJ3GEYJ101V	Chip, 100 $\Omega$ 1/16W	
R119	ERJ3GEYJ223V	Chip, 22k $\Omega$ 1/16W	
R120	ERJ3GEYJ223V	Chip, 22k $\Omega$ 1/16W	
R121	ERJ3GEYJ223V	Chip, 22k $\Omega$ 1/16W	
R401	ERJ3GEYJ472V	Chip, 4.7k $\Omega$ 1/16W	
R402	ERJ3GEYJ471V	Chip, 470 $\Omega$ 1/16W	
R403	ERJ3GEYJ472V	Chip, 4.7k $\Omega$ 1/16W	
R404	ERJ3GEYJ472V	Chip, 4.7k $\Omega$ 1/16W	
R405	ERJ3GEYJ472V	Chip, 4.7k $\Omega$ 1/16W	
R406	ERJ3GEYJ472V	Chip, 4.7k $\Omega$ 1/16W	
R407	ERJ3GEYJ332V	Chip, 3.3k $\Omega$ 1/16W	
R408	ERJ3GEYJ332V	Chip, 3.3k $\Omega$ 1/16W	
R409	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R410	ERJ3GEYJ394V	Chip, 390k $\Omega$ 1/16W	
R411	ERJ3GEYJ104V	Chip, 100k $\Omega$ 1/16W	
R412	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R413	ERJ3GEYJ333V	Chip, 33k $\Omega$ 1/16W	
R414	ERJ3GEYJ334V	Chip, 330k $\Omega$ 1/16W	
R452	ERJ3GEYJ472V	Chip, 4.7k $\Omega$ 1/16W	
R453	ERJ3GEYJ472V	Chip, 4.7k $\Omega$ 1/16W	
R456	ERJ3GEYJ472V	Chip, 4.7k $\Omega$ 1/16W	
R457	ERJ3GEYJ473V	Chip, 47k $\Omega$ 1/16W	
R458	ERJ3GEYJ563V	Chip, 56k $\Omega$ 1/16W	
R459	ERJ3GEYJ563V	Chip, 56k $\Omega$ 1/16W	
R461	ERJ3GEYJ473V	Chip, 47k $\Omega$ 1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R462	ERJ3GEYJ473V	Chip, 47k $\Omega$ 1/16W	
R463	ERJ3GEYJ151V	Chip, 150 $\Omega$ 1/16W	
R464	ERJ3GEYJ151V	Chip, 150 $\Omega$ 1/16W	
R465	ERJ3GEYJ473V	Chip, 47k $\Omega$ 1/16W	
R466	ERJ3GEYJ473V	Chip, 47k $\Omega$ 1/16W	
R467	ERJ3GEYJ473V	Chip, 47k $\Omega$ 1/16W	
R468	ERJ3GEYJ331V	Chip, 330 $\Omega$ 1/16W	
R901	ERJ6GEYJ1R5	Chip, 1.5 $\Omega$ 1/10W	
R902	ERJ3GEYJ221V	Chip, 220 $\Omega$ 1/16W	
R903	ERJ3GEYJ221V	Chip, 220 $\Omega$ 1/16W	
R906	ERJ3GEYJ472V	Chip, 4.7k $\Omega$ 1/16W	
R907	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R951	ERJ3GEYJ223V	Chip, 22k $\Omega$ 1/16W	
R952	ERJ3GEYJ223V	Chip, 22k $\Omega$ 1/16W	
R953	ERJ3GEYJ223V	Chip, 22k $\Omega$ 1/16W	
R954	ERJ3GEYJ223V	Chip, 22k $\Omega$ 1/16W	
R955	ERJ3GEYJ562V	Chip, 5.6k $\Omega$ 1/16W	
R956	ERJ3GEYJ562V	Chip, 5.6k $\Omega$ 1/16W	
R957	ERJ3GEYJ562V	Chip, 5.6k $\Omega$ 1/16W	
R958	ERJ3GEYJ562V	Chip, 5.6k $\Omega$ 1/16W	
R959	ERJ3GEYJ563V	Chip, 56k $\Omega$ 1/16W	
R960	ERJ3GEYJ563V	Chip, 56k $\Omega$ 1/16W	
R961	ERJ3GEYJ562V	Chip, 5.6k $\Omega$ 1/16W	
R962	ERJ3GEYJ562V	Chip, 5.6k $\Omega$ 1/16W	

## 2.5. Connectors

### CD SERVO BLOCK [E-8400]

Ref. No.	Part No.	Part Name & Description	Remarks
CN101	YEA5220715	Connector, 15P	
CN402	YEA5227114	Connector, 14P	
CN901	YEA5220715	Connector, 15P	
CN902	YEA5220406T	Connector, 6P	
CN903	YEA5326102	Connector, 2P	

## 2.6. Electric Parts

### SWITCHES

Ref. No.	Part No.	Part Name & Description	Remarks
SW2	YEAS09248R	Switch	
SW1	YEAS09308	Switch	

### CRYSTAL

Ref. No.	Part No.	Part Name & Description	Remarks
XL401	YEXLCSTC169T	Crystal	
XL451	YEXLSTCC419T	Crystal	

### COIL

Ref. No.	Part No.	Part Name & Description	Remarks
L101	YELTLM41P750	Coil	

### TERMINAL

Ref. No.	Part No.	Part Name & Description	Remarks
TP1	YEATSD00405	Terminal	

## 2.7. Mechanical Parts

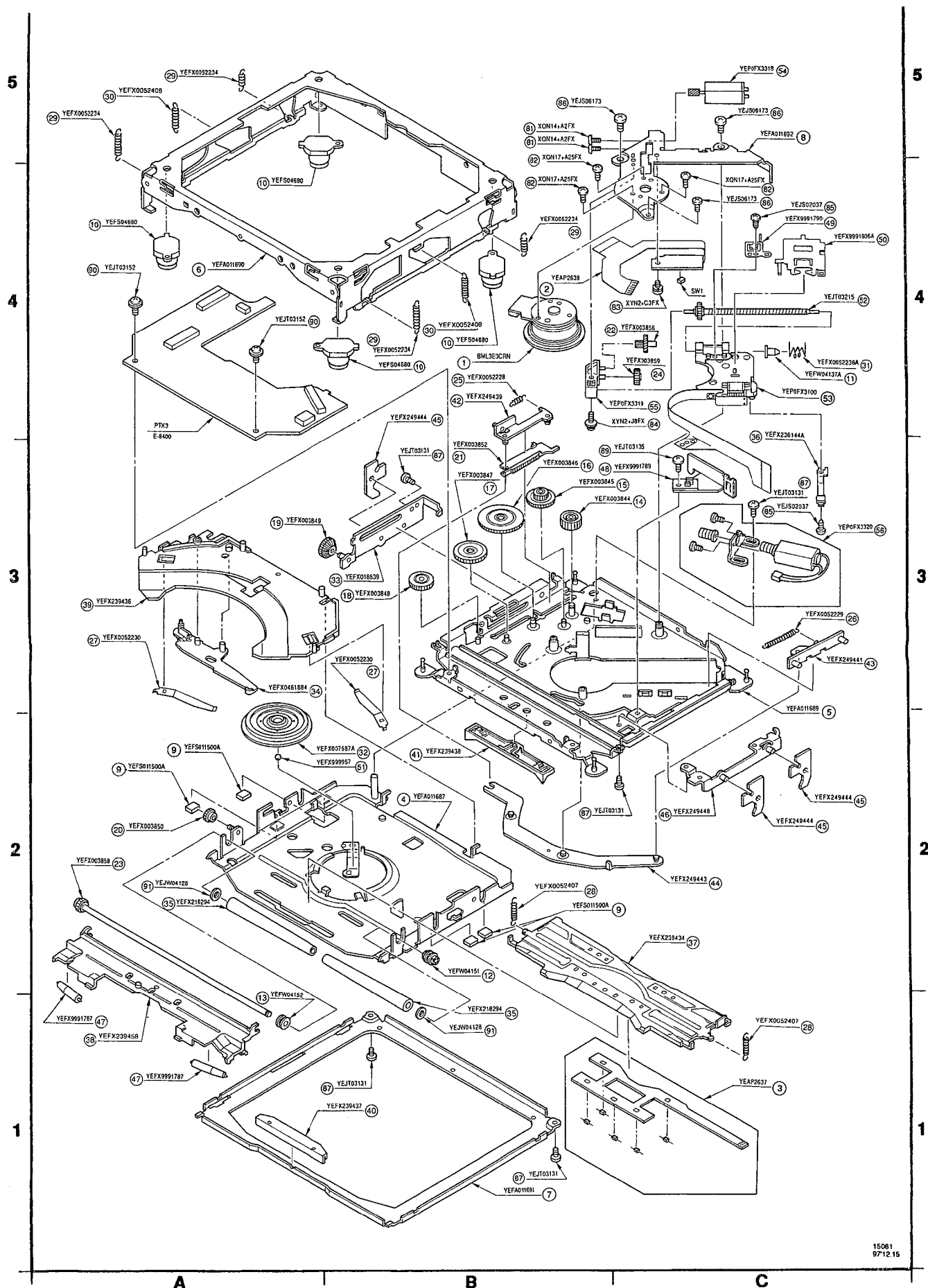
### MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
1	BML3E3CRN	Spindle Motor	(4-B)
2	YEAP2638	Suspension FPC	(4-B)
3	YEAP2637	Disc Guide FPC	(1-C)
4	YEFA011687	Clamp chassis Ass'y	(2-B)
5	YEFA011689	Suspension chassis Ass'y	(2-C)
6	YEFA011690	Main chassis	(4-A)
7	YEFA011691	Upper chassis	(1-B)
8	YEFA011692	Spindle Plate	(5-C)
9	YEFS011500A	Pad	(2-A) (2-C)

Ref. No.	Part No.	Part Name & Description	Remarks
10	YEFS04680	Dumper	(4-A) (4-B)
11	YEFW04137A	Feed Screw Housing	(4-C)
12	YEFW04151	Roller Shaft Holder (L)	(2-B)
13	YEFW04152	Roller Shaft Holder (R)	(1-A)
14	YEFX003844	Clamp Gear (1)	(3-C)
15	YEFX003845	Clamp Gear (2)	(3-C)
16	YEFX003846	Clamp Gear (3)	(3-B)
17	YEFX003847	Loading Gear (4)	(3-B)
18	YEFX003848	Loading Gear (5)	(3-B)
19	YEFX003849	Loading Gear (6)	(3-A)
20	YEFX003850	Loading Gear (7)	(2-A)
21	YEFX003852	Clamp Rack	(3-B)
22	YEFX003856	Traverse Gear (2)	(4-C)
23	YEFX003858	Roller Gear Ass'y	(2-A)
24	YEFX003859	Traverse Gear (3)	(4-C)
25	YEFX0052228	Clamp Rack Spring	(4-B)
26	YEFX0052229	Slide Lever Spring	(3-C)
27	YEFX0052230	Guide Spring	(3-A) (3-B)
28	YEFX0052407	Guide Spring (F)	(1-C) (2-B)
29	YEFX0052234	Suspension Spring	(4-B)
30	YEFX0052408	Offset Spring	(4-B)
31	YEFX0052236A	Thrust Adjustment Spring	(4-C)
32	YEFX007587A	Clamper	(2-B)
33	YEFX018539	Gear Bracket Ass'y	(3-B)
34	YEFX0461884	Changeover Lever	(3-A)
35	YEFX218294	Rubber Roller	(1-B) (2-A)
36	YEFX236144A	Traverse Guide	(3-C)
37	YEFX239434	Disc Guide (FU)	(2-C)
38	YEFX239458	Disc Guide (FL)	(1-A)
39	YEFX239436	Disc Guide (BU)	(3-A)
40	YEFX239437	Disc Guide (CU)	(1-B)
41	YEFX239438	Disc Guide (CL)	(2-B)
42	YEFX249439	Slide Lever (R) Ass'y	(4-B)
43	YEFX249441	Slide Lever (L) Ass'y	(3-C)
44	YEFX249443	Connecting Arm Ass'y	(2-C)
45	YEFX249444	Clamp Cam	(2-C) (4-B)
46	YEFX249448	Cam Holder Plate Ass'y	(2-C)
47	YEFX9991787	Disc Guide	(1-A)
48	YEFX9991789	FPC Holder	(3-B)
49	YEFX9991790	Feed Screw Holder Ass'y	(4-C)
50	YEFX9991806A	Shield Plate	(4-C)
51	YEFX999957	Steel Ball	(2-B)
52	YEJT03215	Feed Screw Ass'y	(4-C)
53	YEP0FX3100	Optical Pickup Ass'y	(4-C)
54	YEP0FX3318	Traverse Motor Ass'y	(5-C)
55	YEP0FX3319	Housing Ass'y	(4-C)
56	YEP0FX3320	Loading Motor Ass'y	(3-C)
81	XQN14+A2FX	Screw, 1.4mm*2mm	(5-B)
82	XQN17+A25FX	Screw, 1.7mm*2.5mm	(4-B) (4-C)
83	XYN2+C3FX	Screw, 2mm*3mm	(4-C)
84	XYN2+J8FX	Screw, 2mm*8mm	(4-C)
85	YEJS02037	Screw, 1.6mm*4mm	(3-C) (4-C)
86	YEJS06173	Screw, 2mm*3mm	
87	YEJT03131	Screw, 2.6mm*5mm	
89	YEJT03135	Screw, 2mm*5mm	(3-B)
90	YEJT03152	Screw, 2.6mm*4mm	(4-A)
91	YEJW04128	Washer	(1-B) (2-A)

### EXPLODED VIEW (CD PLAYER PARTS)

■ Numbers in ○ are indicated REF. No. in the REPLACEMENT PARTS LIST



### 3 MD Player Parts

#### Note:

1. Be sure to make your orders of replacement parts according to this list.
2. Important safety notice: Components, identified by  $\Delta$  mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. Location keys in the remarks column indicates the general location of the parts shown in the exploded drawing, as in a load map.

#### 3.1. IC's and Transistors

MD SERVO BLOCK [D96222A/3]

Ref. No.	Part No.	Part Name & Description	Remarks
IC101	AN8771NFK	IC	
IC201	YEAMBBDA1717	IC	
IC401	MN66614R4C1	IC	
IC451	YEAMHML740L6	IC	
IC461	YEAMTC7SL08F	IC	
IC462	YEAMTC7SL08F	IC	
IC501	MN101C01DAF	IC	
IC551	YEAMMC3326D3	IC	
IC701	YEAMBA6891FP	IC	
Q101	2SB766ATX	Transistor	

MD SUB BLOCK [E-8714]

Ref. No.	Part No.	Part Name & Description	Remarks
Q1	YEANC1623	Transistor	
Q2	YEANC1623	Transistor	
Q3	2SB1073TX	Transistor	

SW BLOCK [MD1-001-2-01]

Ref. No.	Part No.	Part Name & Description	Remarks
IC801	YEAMBA6858FP	IC	

#### 3.2. Diodes

MD SERVO BLOCK [D96222A/3]

Ref. No.	Part No.	Part Name & Description	Remarks
D401	MA151ATX	Diode	
D701	YEADRD33M2T1	Diode	

MD SUB BLOCK [E-8714]

Ref. No.	Part No.	Part Name & Description	Remarks
D1	MA151WKT	Diode	
D2	MA165	Diode	

#### 3.3. Capacitors

MD SERVO BLOCK [D96222A/3]

Ref. No.	Part No.	Part Name & Description	Remarks
C101	YECUZ1H103KX	Ceramic, 0.01pF 50WV	
C102	YECUZ1H103KX	Ceramic, 0.01pF 50WV	
C103	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C104	YECUZ1H103KX	Ceramic, 0.01pF 50WV	
C105	YECUZ1H681JM	Ceramic, 680pF 50WV	
C106	YECUZ1H332KX	Ceramic, 3300pF 50WV	
C107	YECUZ1H102KX	Ceramic, 1000pF 50WV	
C108	YECUZ1H332KX	Ceramic, 3300pF 50WV	
C109	YECUZ1H103KX	Ceramic, 0.01pF 50WV	
C110	YECUZ1H102KX	Ceramic, 1000pF 50WV	
C111	YECUZ1H272KX	Ceramic, 2700pF 50WV	
C112	YECUZ1H102KX	Ceramic, 1000pF 50WV	
C113	YECUZ1H102KX	Ceramic, 1000pF 50WV	
C114	YECUZ1E223KX	Ceramic, 0.022pF 25WV	

Ref. No.	Part No.	Part Name & Description	Remarks
C115	YECUS1C474KX	Ceramic, 0.47pF 16WV	
C116	YECUZ1H472KX	Ceramic, 4700pF 50WV	
C117	YECUZ1H472KX	Ceramic, 4700pF 50WV	
C118	YECUZ1C823KX	Ceramic, 0.082pF 16WV	
C119	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C120	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C121	YECUZ1H332KX	Ceramic, 3300pF 50WV	
C122	YECUS1ET106R	Ceramic, 10pF 25WV	
C125	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C126	ECEH0JVC470F	Electrolytic, 47pF 6.3WV	
C127	YECUS1C154KX	Ceramic, 0.15pF 16WV	
C128	YECUZ1C333KX	Ceramic, 0.033pF 16WV	
C129	YECUS1C474KX	Ceramic, 0.47pF 16WV	
C130	YECUZ1C333KX	Ceramic, 0.033pF 16WV	
C131	YECUS1C474KX	Ceramic, 0.47pF 16WV	
C132	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C133	ECEH0JVC470F	Electrolytic, 47pF 6.3WV	
C134	YECUS1A105KX	Ceramic, 1pF 10WV	
C135	YECUS1A105KX	Ceramic, 1pF 10WV	
C136	YECUS1C224KX	Ceramic, 0.22pF 16WV	
C137	YECUS1C224KX	Ceramic, 0.22pF 16WV	
C138	YECUZ1H332KX	Ceramic, 3300pF 50WV	
C140	YECUZ1E223KX	Ceramic, 0.022pF 25WV	
C144	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C145	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C146	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C201	YECUS1A105KX	Ceramic, 1pF 10WV	
C202	YECUS1A105KX	Ceramic, 1pF 10WV	
C203	ECEH1CVC220F	Electrolytic, 22pF 16WV	
C204	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C205	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C301	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C401	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C402	YECUZ1H102KX	Ceramic, 1000pF 50WV	
C403	YECUZ1H102KX	Ceramic, 1000pF 50WV	
C404	YECUS1A105KX	Ceramic, 1pF 10WV	
C405	YECUS1A105KX	Ceramic, 1pF 10WV	
C406	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C407	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C408	YECUS1C474KX	Ceramic, 0.47pF 16WV	
C409	YECUZ1C473KX	Ceramic, 0.047pF 16WV	
C410	YECUZ1H103KX	Ceramic, 0.01pF 50WV	
C411	YECUZ1H222KX	Ceramic, 2200pF 50WV	
C412	YECUZ1H222KX	Ceramic, 2200pF 50WV	
C413	YECUZ1H103KX	Ceramic, 0.01pF 50WV	
C414	YECUZ1C683KX	Ceramic, 0.068pF 16WV	
C415	YECUZ1E223KX	Ceramic, 0.022pF 25WV	
C416	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C417	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C418	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C419	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C422	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C425	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C426	YECUZ1H103KX	Ceramic, 0.01pF 50WV	
C431	ECEH0JVC470F	Electrolytic, 47pF 6.3WV	
C432	ECEH0JVC470F	Electrolytic, 47pF 6.3WV	
C461	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C462	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C501	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C502	ECEH0JVC470F	Electrolytic, 47pF 6.3WV	
C503	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C551	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C552	YECUS1C106MS	Ceramic, 10pF 16WV	
C553	YECUS1A105KX	Ceramic, 1pF 10WV	
C701	ECEH1CVC220F	Electrolytic, 22pF 16WV	
C702	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C703	YECUZ1H102KX	Ceramic, 1000pF 50WV	
C704	YECUZ1H102KX	Ceramic, 1000pF 50WV	
C705	YECUZ1H103KX	Ceramic, 0.01pF 50WV	

SW BLOCK [MD1-001-2-01]

Ref. No.	Part No.	Part Name & Description	Remarks
C802	YECUZ1C104KX	Ceramic, 0.1pF 16WV	



Ref. No.	Part No.	Part Name & Description	Remarks
C803	YECUZ1C103KX	Ceramic, 0.01pF 16WV	
C804	YECUZ1C104KX	Ceramic, 0.1pF 16WV	
C805	YECUZ1C104KX	Ceramic, 0.1pF 16WV	

### 3.4. Resistors

MD SERVO BLOCK [D96222A/3]

Ref. No.	Part No.	Part Name & Description	Remarks
R101	ERJ3GEYJ222V	Chip, 2.2k $\Omega$ 1/16W	
R102	ERJ3GEYJ222V	Chip, 2.2k $\Omega$ 1/16W	
R103	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R104	ERJ3GEYJ393V	Chip, 39k $\Omega$ 1/16W	
R105	ERJ3GEYJ153V	Chip, 15k $\Omega$ 1/16W	
R106	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R107	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R108	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R109	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R110	ERJ3GEYJ223V	Chip, 22k $\Omega$ 1/16W	
R111	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R112	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R113	ERJ3GEYJ472V	Chip, 4.7k $\Omega$ 1/16W	
R114	ERJ3GEYJ472V	Chip, 4.7k $\Omega$ 1/16W	
R117	ERJ3GEYJ222V	Chip, 2.2k $\Omega$ 1/16W	
R118	ERJ14YJ4R7H	Chip, 4.7 $\Omega$ 1/16W	
R119	ERJ3GEYJ474V	Chip, 470k $\Omega$ 1/16W	
R120	ERJ3GEYJ471V	Chip, 470 $\Omega$ 1/16W	
R122	ERJ3GEYJ222V	Chip, 2.2k $\Omega$ 1/16W	
R133	ERJ3GEYJ472V	Chip, 4.7k $\Omega$ 1/16W	
R134	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R135	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R202	ERJ3GEYJ2R2V	Chip, 2.2 $\Omega$ 1/16W	
R401	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R402	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R403	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R404	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R407	ERJ3GEYJ391V	Chip, 390 $\Omega$ 1/16W	
R408	ERJ3GEYJ222V	Chip, 2.2k $\Omega$ 1/16W	
R409	ERJ3GEYJ391V	Chip, 390 $\Omega$ 1/16W	
R411	ERJ3GEYJ471V	Chip, 470 $\Omega$ 1/16W	
R412	ERJ3GEYJ333V	Chip, 33k $\Omega$ 1/16W	
R413	ERJ3GEYJ222V	Chip, 2.2k $\Omega$ 1/16W	
R414	ERJ3GEYJ101V	Chip, 100 $\Omega$ 1/16W	
R415	ERJ3GEYJ473V	Chip, 47k $\Omega$ 1/16W	
R416	ERJ3GEYJ222V	Chip, 2.2k $\Omega$ 1/16W	
R417	ERJ3GEYJ101V	Chip, 100 $\Omega$ 1/16W	
R418	ERJ3GEYJ122V	Chip, 1.2k $\Omega$ 1/16W	
R419	ERJ3GEYJ471V	Chip, 470 $\Omega$ 1/16W	
R420	ERJ3GEYJ182V	Chip, 1.8k $\Omega$ 1/16W	
R421	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R422	ERJ3GEYJ101V	Chip, 100 $\Omega$ 1/16W	
R425	ERJ3GEYJ153V	Chip, 15k $\Omega$ 1/16W	
R426	ERJ3GEYJ153V	Chip, 15k $\Omega$ 1/16W	
R427	ERJ3GEYJ392V	Chip, 3.9k $\Omega$ 1/16W	
R429	ERJ3GEYJ101V	Chip, 100 $\Omega$ 1/16W	
R432	ERJ3GEYJ223V	Chip, 22k $\Omega$ 1/16W	
R433	ERJ3GEYJ333V	Chip, 33k $\Omega$ 1/16W	
R501	ERJ3GEYJ563V	Chip, 56k $\Omega$ 1/16W	
R502	ERJ3GEYJ564V	Chip, 560k $\Omega$ 1/16W	
R511	ERJ3GEYJ332V	Chip, 3.3k $\Omega$ 1/16W	
R513	ERJ3GEYJ332V	Chip, 3.3k $\Omega$ 1/16W	
R515	ERJ3GEYJ332V	Chip, 3.3k $\Omega$ 1/16W	
R517	ERJ3GEYJ332V	Chip, 3.3k $\Omega$ 1/16W	
R533	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R551	ERJ3GEYJ334V	Chip, 330k $\Omega$ 1/16W	
R701	ERJ3GEYJ273V	Chip, 27k $\Omega$ 1/16W	
R702	ERJ3GEYJ223V	Chip, 22k $\Omega$ 1/16W	
R703	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R704	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R705	ERJ3GEYJ153V	Chip, 15k $\Omega$ 1/16W	
R706	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R708	ERJ3GEYJ223V	Chip, 22k $\Omega$ 1/16W	
R709	ERJ3GEYJ153V	Chip, 15k $\Omega$ 1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R711	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R712	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R713	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R714	ERJ3GEYJ391V	Chip, 390 $\Omega$ 1/16W	
R720	ERJ3GEYJ683V	Chip, 68k $\Omega$ 1/16W	
R730	ERJ3GEYJ101V	Chip, 100 $\Omega$ 1/16W	

MD SUB BLOCK [E-8714]

Ref. No.	Part No.	Part Name & Description	Remarks
R1	ERJ14YJ221H	Chip, 220 $\Omega$ 1/4W	
R2	ERJ6GEYJ472	Chip, 4.7k $\Omega$ 1/16W	
R3	ERJ6GEYJ334	Chip, 330k $\Omega$ 1/16W	
R4	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/16W	
R5	ERJ6GEYJ104	Chip, 100k $\Omega$ 1/16W	

SW BLOCK [MD1-001-2-01]

Ref. No.	Part No.	Part Name & Description	Remarks
R801	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R802	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R803	ERJ3GEYJ1R5V	Chip, 1.5 $\Omega$ 1/16W	
R804	ERJ3GEYJ101V	Chip, 100 $\Omega$ 1/16W	
R805	ERJ3GEYJ101V	Chip, 100 $\Omega$ 1/16W	

### 3.5. Connectors

MD SERVO BLOCK [D96222A/3]

Ref. No.	Part No.	Part Name & Description	Remarks
CN1	YEA0114TKCR	Connector, 14P	
CN101	YEA05243521	Connector, 21P	
CN901	YEA05274614	Connector, 14P	
CN902	YEA05326104	Connector, 4P	

SW BLOCK [MD1-001-2-01]

Ref. No.	Part No.	Part Name & Description	Remarks
CN801	YEA05243612	Connector, 12P	
CN802	YEA05274611	connector, 11P	

### 3.6. Electric Parts

SWITCHES

Ref. No.	Part No.	Part Name & Description	Remarks
SW1	YEAS09314	Switch	
SW2	YEAS09314	Switch	
SW3	YEAS09314	Switch	
SW4	YEAS09308	Switch	

CRYSTALS

Ref. No.	Part No.	Part Name & Description	Remarks
XL401	YEXLSTCV169T	Crystal	
XL501	YEXLSTCC737T	Crystal	

VARIABLE RESISTOR

Ref. No.	Part No.	Part Name & Description	Remarks
VR101	YEVNPOZ3A104	Variable Resistor	

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L552	EXCCE103U	Coil	
L553	EXCCE103U	Coil	

### 3.7. Mechanical Parts

MISCELLANEOUS

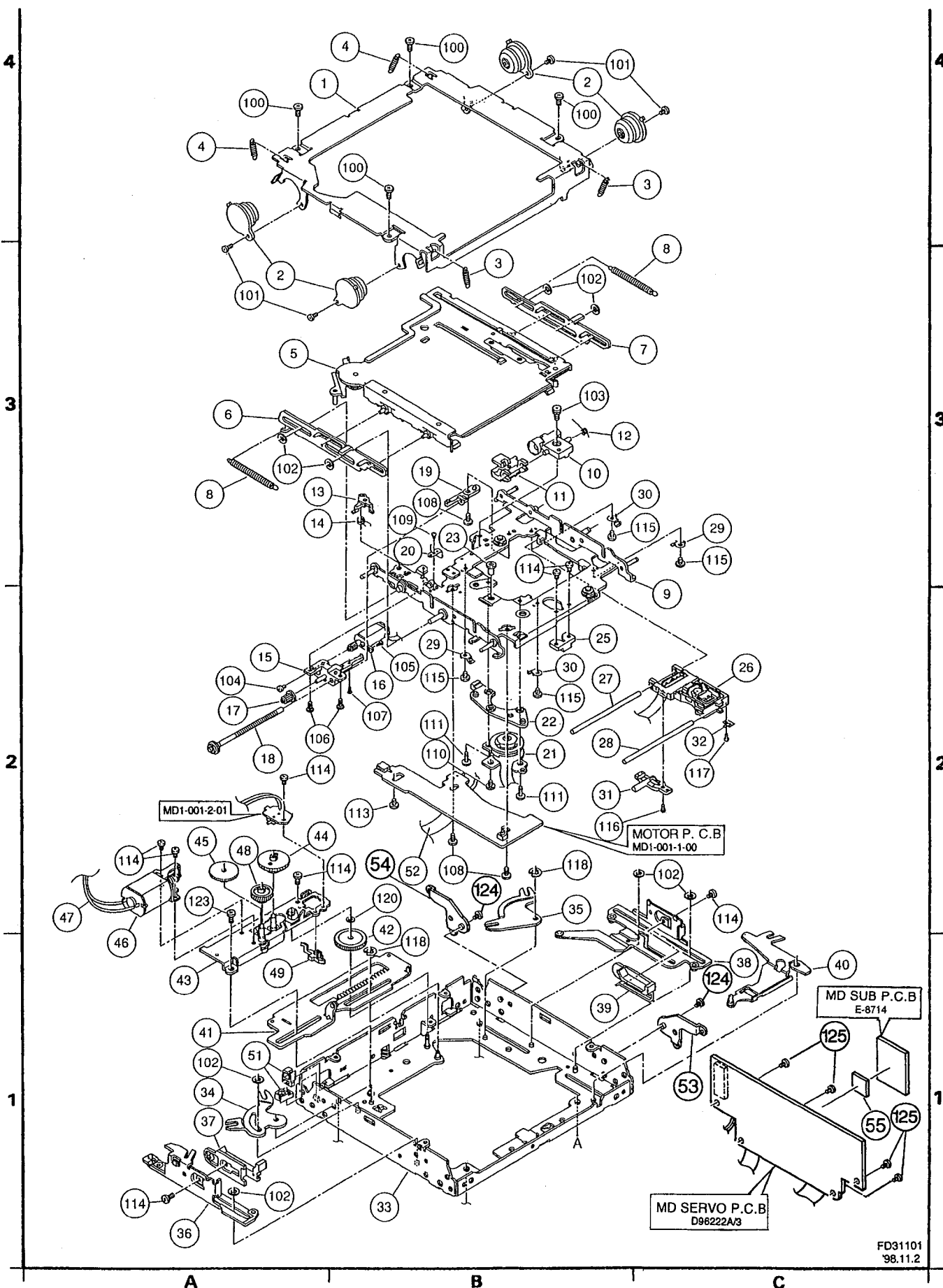
Ref. No.	Part No.	Part Name & Description	Remarks
TP1	YEATSD00405	Terminal	
1	YESFA03049	Upper Chassis	(4-B)
2	YESFS04012	Dumper	(3-A) (4-B)

Ref. No.	Part No.	Part Name & Description	Remarks
3	YESFX005107	Float Spring A	(3-B) (4-C)
4	YESFX005108	Float Spring B	(4-A) (4-B)
5	YESFX239011	Cartridge Holder Ass'y	(3-A)
6	YESFX046097	Slide Cam Plate L	(3-A)
7	YESFX046098	Slide Cam Plate R	(3-C)
8	YESFX005109	Slide Cam Spring	(3-A) (3-C)
9	YESFA01058	Suspension Chassis Ass'y	(2-C)
10	YESFX046099	Suspension Lock B	(3-B)
11	YESFX046110	Actuator B	(3-B)
12	YESFX005110	Lock Spring B	(3-B)
13	YESFX046111	SW Actuator	(3-B)
14	YESFX005111	SW Actuator Spring	(3-B)
15	YESFX021107	Motor Bracket A	(2-A)
16	YESAK01020	Motor Ass'y	(2-B)
17	YESFX003069	Motor Gear B	(2-A)
18	YESFX999038	Feed Screw Ass'y	(2-A)
19	YESFX021108	Motor Bracket C	(3-B)
20	YESFX005112	Leaf Spring	(3-B)
21	BQL2A1CRH	Spindle Motor	(2-B)
22	YESFX046100	Spindle Motor Holder	(2-B)
23	YESFW01025	Spindle Motor Mounting Bracket	(3-B)
25	YESFX046101	Lock Cam F	(2-B)
26	KLR1001J	Optical Pickup Ass'y	(2-C)
27	YESFW01026	Guide Shaft	(2-B)
28	YESFW01027	Sub Guide Shaft	(2-B)
29	YESFX005113	Shaft Holder R	(2-B) (3-C)
30	YESFX005114	Shaft Holder L	(2-B) (3-C)
31	YESFX046102	Feed Screw Housing Ass'y	(2-B)
32	YESFX005115	Guide Shaft Spring	(2-C)
33	YESFA01057	Main Chassis Ass'y	(1-B)
34	YESFX046103	Rink Plate L	(1-A)
35	YESFX046104	Rink Plate R	(2-B)
36	YESFX046105	Suspension Guide L Ass'y	(1-A)
37	YESFX046106	Suspension Guide L	(1-A)
38	YESFX046112	Suspension Guide R Ass'y	(1-C)
39	YESFX046107	Suspension Guide R	(1-B)
40	YESFX046108	Lock Plate F Ass'y	(1-C)
41	YESFX046109	Rack Plate Ass'y	(1-A)
42	YESFX003070	Gear E	(2-B)
43	YESFX018005	Gear Mounting Bracket Ass'y	(1-A)
44	YESFX003071	Gear D	(2-A)
45	YESFX003072	Gear C	(2-A)
46	YESAK01021	Loading Motor Ass'y	(1-A)
47	YESAJ02006	Motor Extension Cord	(2-A)
48	YESFX003073	Gear B	(2-A)
49	YESFX046113	SW Actuator E	(1-A)
51	YESFR01018	Clamper C	(1-A)
52	YESAP176	Motor FPC	(2-B)
53	YESFX021109	P. Bracket F	(1-C)
54	YESFX021110	P. Bracket B	(2-B)
55	YEF011544	PCB Mounting Pad	(1-C)
100	YESJS01118	Screw, 2.6mm*3mm	(4-A) (4-B)
101	YESJS01119	Screw, 2mm*3.5mm	(3-A) (4-B)
102	YESJE01014	Retaining Ring, 2.1mm*5mm*0.4mm	
103	YESJS01120	Screw, 2.6mm*3.5mm	(3-B)
104	YESJS01121	Screw, 1.2mm*3mm	(2-A)
105	YESJT03054	Screw, 1.2mm*2mm	(2-B)
106	YESJS01122	Screw, 1.4mm*2.5mm	(2-A)
107	YESJS01123	Screw, 1.2mm*3mm	(2-B)
108	YESJS01124	Screw, 2mm*3mm	(2-B) (3-B)
109	YESJS01125	Screw, 1.4mm*1.5mm	(3-B)
110	YESJS01126	Screw, 1.7mm*3mm	(2-B)
111	YESJS01127	Screw, 1.7mm*5.5mm	(2-B)
113	YESJS01128	Screw, 1.7mm*2.5mm	(2-B)
114	YESJT03055	Screw, 2mm*3mm	(2-B)

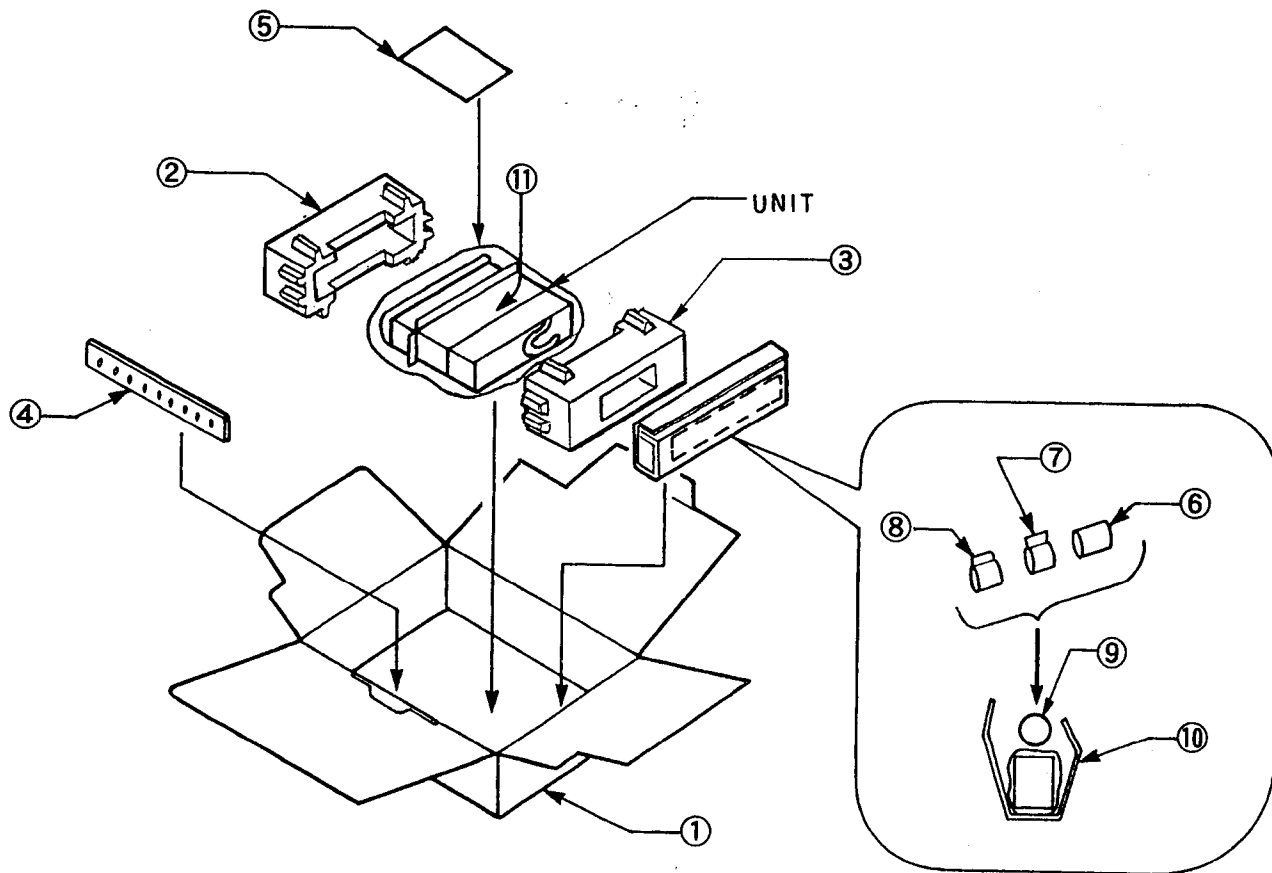
Ref. No.	Part No.	Part Name & Description	Remarks
115	YESJS01129	Screw, 2mm*2mm	(2-B) (3-C)
116	YESJS01130	Screw, 1.4mm*3mm	(3-D)
117	YESJS01131	Screw, 1.2mm*1.5mm	(2-C)
118	YESJE01027	E-Ring, 2mm	(2-B)
120	YESJW01035	Washer, 1.65mm	(2-B)
123	YESJS01132	Screw, 2mm*2.2mm	(2-A)
124	YESJT03059	Camera Screw, 2.6mm*3mm	(1-C) (2-B)
125	YESJT03117	Screw, 2mm*4mm	(1-C)

## EXPLODED VIEW (MD PLAYER PARTS)

Numbers in ○ are indicated REF. No. in the REPLACEMENT PARTS LIST



## PACKING PARTS LIST



● Item numbers listed below should not order regular spare parts. (not available)

Item No.	Parts No.	Parts Name & Description	Q'ty	Remarks
①	—	Inner Carton	1	Not available
②	—	Paking Pad, Front	1	Not available
③	—	Paking Pad, Rear	1	Not available
④	YEFG04019	Rear Support Strap	1	
⑤	—	Operating Instructions Kit	1	Not available
	YEFM283317	Operating Instructions	(1)	
	—	Warranty Card	(1)	Not available
	—	Servicenter List	(1)	Not available
⑥	YEP9FZ2714	Screw Kit	1	
⑦	CR2032/1F	Battery	1	
⑧	YEFX9992008	Remote Control Unit	1	
⑨	YEAJ02802	Power Connector	1	
⑩	YEFA131302	Removal Face Plate Case	1	
⑪	YEFX0214198	Mounting Collar	1	